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GOLD MEDAL PRIZE ESSAY COMPETITION

The Council has selected the following subject for the Gold Medal Prize Essay Competition for 1946:

"Co-ordination and control in peace and war of the forces of all three services, British and Dominion, in the Indian Ocean and neighbouring territories."

The interdependence of the three Fighting Services, one upon another, was demonstrated time and again during the late war. The success achieved when the three have planned and operated with one object and under a unified direction has been remarkable. This has, however, tended to create a complicated system of command with large staffs.

Bearing in mind the necessity for the three Services to continue to train to operate as one whole, and the danger in peacetime of each retiring into its own watertight compartment, examine the possible ways of evolving from our own war experience a simplified system of command which will ensure the closest inter-service co-ordination for the Commonwealth forces in peace and in war.

A definition of the geographical scope has been left to the essayist to develop

Entries are invited from all commissioned officers of His Majesty's Forces, from gazetted officers of the Civil Administration in India, and from officers of the Indian States Forces.

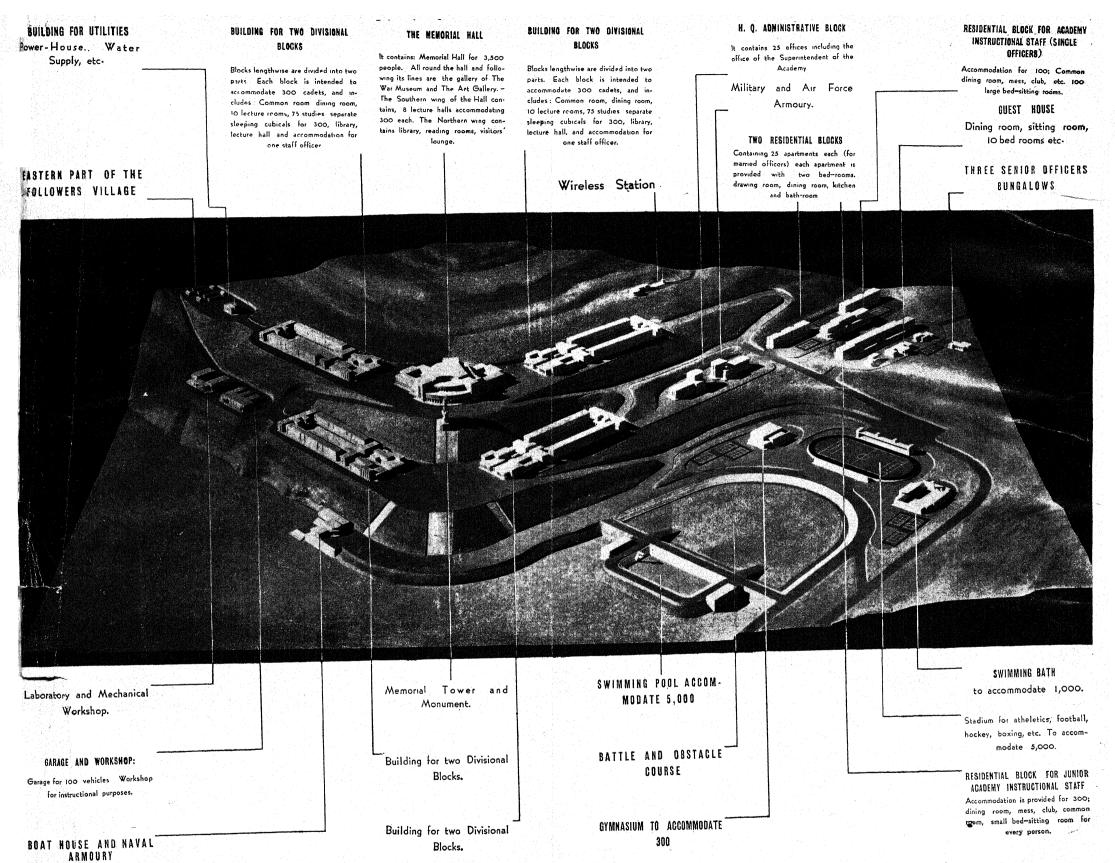
Essays, which should be typewritten (double spacing) and submitted in triplicate, must be received by the Secretary, United Service Institution of India, Simla, on or before June 30, 1946. In order that the anonymity of each candidate should be preserved, a motto should be written at the top of each entry. A sealed envelope, bearing on the outside the motto, and containing inside the name and address of the author of the essay, must accompany each entry.

Entries should not exceed fifteen pages (approx. 8,000 words) of the size and style of the Journal. Should any authority be quoted in the essay, the title of the work referred to should be given.

Three judges chosen by the Council will adjudicate. They may recommend a money award not exceeding Rs. 500, either in addition to, or in substitution of, the Gold Medal, and will submit their decision to the Council. The name of the successful candidate will be published in the October, 1946 issue of the Journal.

Copyright of all essays submitted will be reserved by the Council of the United Service Institution of India.





A Picture of a Model of the Indian National War Memorial Military Academy.



FOR REFERENCE

Not to be taken eat

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The views expressed in this Journal are in no sense official, and the opinions of contributors in their published articles are not necessarily those of the Council of the Institution

MATTERS OF MOMENT

IBERTY will not descend to a people. A people must raise themselves to liberty. It is a blessing that must be earned before it can be enjoyed." With "The Four Freedoms" substituted for "Liberty" that significant epigram inscribed over an entrance to Imperial Secretariat, New Delhi, can be taken to heart by more than one country, for the future peace and prosperity of this world of ours A Matter For depends in great measure on the assiduity with which **Individuals** individuals apply themselves to their work. Twentyseven years ago millions of men returned to their homes, glad that death and devastation were over. Victory brought relaxation, then complacency. We believed a better world had dawned; that a League of Nations would guard treaties of peace; that material prosperity was the right goal. Time proved us to be wrong. Ambition and fear broke covenants and pacts, armaments were discarded, armies disbanded, research dispensed with. War, with all its destruction, came, as many foretold it would. Now we, the victorious nations, have another chance to practice a lesson we should have learned in the 'twenties. "The Four Freedoms" of the United Nations must be earned to be enjoyed; the same cool nerve, the same toughness of spiritual fibre which won the war must win the peace. Indolence and self-seeking by individual men and women must give place to vigour and self-sacrifice if we are to succeed. "Take heed to thyself, and keep thy soul diligent, lest thou forget the thing which thine eyes have seen."

V ICTORIOUS nations have hitherto enjoyed the "fruits of victory." If, however, fruits be the touchstone of victory, Great Britain has been peculiarly unfortunate. The first Great War ended for Britain with a colossal debt mainly incurred because of her loans to other nations.

This time the reward of the nation which led the world "Fruits" out of mortal danger and suffered severely in doing so of is a staggering loan of £1,100,000,000 at 2% interest, to Victory be repaid by the year 2000. Agreement to the loan was clearly preferable to the trials and difficulties non-acceptance would have entailed. Acceptance, however, carries with it the obligation to join the International Monetary Fund and be represented next year at an International Conference, which is to consider cutting tariffs and Preferences. Cynics mistakenly suggest that, confronted with this staggering load of debt, Britain has become a second-class Power. They need not delude themselves. Britain will face this financial Dunkirk as she faced the military Dunkirk in 1940. Her might is not broken; her destiny is not fulfilled. Her purpose is more exalted now than in the dark days of 1940, and her star will assuredly ascend to its former brilliance.

INDIA'S armed forces have been an admirable object lesson to those in whose hands may lie the future progress of the country. There are many who declare that communal differences will for ever prevent unity in India, but the Forces have proved them to be wrong, for

in no other sphere of life have communal customs The Influence and traditions been swept away to such a degree as in of the the R.I.N., the Indian Army, and the R.I.A.F. India's Forces sailors, soldiers and airmen have shown themselves first as Indians, and second as members of their particular sect. The fostering of this spirit of nationhood is not the only benefit the Armed Forces have rendered to India; it is but one of many ways in which a profound influence has and is being exerted by them on the life and progress of the country. Another influence for good is in the welfare of the soldier's family, for the Fauji Sevadarni scheme, inaugurated at a fateful period in India's history by an enterprising W.V.S., has done incalculable good in pointing the way to better conditions, happier family life and more healthy children. Yet another way in which Armed Forces have been a power for good for the India of the future has been in the realm of education, from the mental stimulus engendered by Group Discussions to highly skilled technical knowledge acquired in workshops. In all these and many other spheres the Services have been torchbearers of a nationwide crusade for better living in a country which has all the conditions required for strength and greatness.

CRITICISM has been forthcoming as to the part played by Indian and British soldiers in the Netherlands East Indies, but the critics have on this occasion shown surprising lack of elementary knowledge. Why are the troops there? Why are they fighting? The plain facts are that on the break-up of Japan, S.E.A.C. was given the task of disarming the

The prisoners of war and civil internees. For the peace of the world, as well as for our own future security, those former enemy forces had to be disarmed and sent to Japan

or elsewhere where they could be prevented from prolonging the troubled atmosphere they had created during the past four years. To carry out their orders, our forces had to possess airfields and ports. Both were and are essential for the evacuation of former prisoner personnel and for the shipment of Japanese troops, and both have to be defended at all costs. That is the simple reason for the presence there of our Armies, and that they have been involved in fighting is solely due to the fact that their airfields and ports have been the centres of attack, and have had accordingly to be defended.

T the end of World War I, sharp criticisms were made because N.A.A.F.I. was alleged to have accumulated vast profits which, said the critics, should have been distributed to the troops. The criticism was later proved to have been unfair, but lest similar criticisms are levelled at the Indian counterpart of N.A.A.F.I.—the Canteens Directorate—we venture to draw attention to the

admirable manner in which its balances are distributed. It was early decided that 50% of its profits should go towards the welfare of British and Indian troops in India, and accordingly three-quarters of that 50% are given to E.N.S.A. and Fauji Dilkhush Sabha in the proportion of two to one, the remaining quarter being devoted to other troops welfare projects. The other 50% of the profits are utilised as running expenses. Since its establishment in July, 1942 the Directorate's turnover has reached astronomical figures, and it is in itself a tribute to its organisation and staff that its expansion has been carried out with such success despite shortage of shipping and supply, and despite the difficulties inherent in the setting-up of a new military organisation in wartime. Military canteens, too, have in no small degree assisted in maintaining reasonable price levels throughout India, for with an influx of large numbers of consumers, some of the trading community were, to put it mildly, not averse to raising prices unduly, and the presence of Canteens where prices are fixed by authority has clearly benefited soldiers and civilians in stabilising prices of many everyday commodities at a fair figure. The Army has

good reason to be grateful to this Cinderella of Directorates, not merely because of the ease with which soldiers can make their purchases, but also because its profits assist indirectly in the provision of their own entertainment.

M ANY of our members are on the point of leaving India, either on retirement or repatriation. We hope the interest they have shown in this Institution and this Journal will be sustained, and that they will continue their membership if for no other reason than that they will there-

by be enabled to widen knowledge of India and its The problems in the Home country, where such knowledge is U.S.I. sadly lacking. Several members have, indeed, already of India intimated their desire to continue receiving the Journal after their departure, and we hope more will follow their example. This Institution can, we think, be proud of the fact that its members, despite heavy calls on their time, have nevertheless contributed so many constructive articles of real interest. Together, those articles have enabled us to produce a Journal which has done much to knit together members of the Forces, and to provide each Service with knowledge of the other two. May we conclude with an appeal to members? We naturally wish to make the Institution and its Journal of greater use to the Forces, and the greater the measure of support we receive, the more effective can be our influence. Any assistance members can give in making the Institution more widely known among their friends will be deeply appreciated. Several factors prevent us approaching every officer, but if present members would help thus to widen the scope of the Institution, their co-operation would be warmly welcomed.

THE FUTURE OF INDIA'S ARMED FORCES*

By H. E. GENERAL SIR CLAUDE AUCHINLECK, G.C.I.E., G.C.B., C.S.I., D.S.O., O.B.E.,

Commander-in-Chief in India.

No firm decision as to the size and composition of the future Navy, Army and Air Force of India has yet been taken. Our plans are, however, well advanced, and we have at least reached the stage when we can put down our outline proposals fairly definitely.

It should not be necessary for me to tell you that these proposals are primarily governed by financial possibilities. India is not yet a rich country, whatever she may become in the future, and the money available for the upkeep of her armed forces in peace is certain to be strictly limited for many years to come. It is no use thinking, therefore, that we shall be able to keep up large navies, armies and air forces. What we have to do is to ensure that though our forces may be small, they shall be of the highest efficiency and thoroughly equipped according to the most modern standards, and that they shall be capable of rapid expansion in emergency not as mass levies, untrained and ill-equipped conscripts, but as efficient and balanced forces fully armed and organized and, most important of all, properly officered.

Numbers still count in war and always will to some extent, so long as man has to engage in personal hand to hand combat before final victory can be won, but modern science has made it possible for quite small forces if properly led and provided with modern arms and equipment to overcome many times their number of half-trained and unequipped levies. This is not always appreciated by the layman in this country, even after six years of total war. You should lose no chance of impressing this vital fact on him.

We hope to have a balanced Indian Navy. Though it may not be a large one, we look forward to having some cruisers, possibly an aircraft carrier as well as destroyers, frigates and other smaller craft. We hope, too, to keep up a flotilla of landing craft for training purposes, so that all the experience and knowledge we have gained of amphibious operations in the recent war may not be lost. The R. I. N. of the future will, I hope, offer a good career to those who wish to live a man's life and be of service to their country. The reputation of the R. I. N. stands very high in the World to-day in relation to its size and youth. I wish it well!

As to the R. I. A. F., that will consist initially of not less than ten squadrons with the necessary training and other establishments. This is not a large force, but I regard it as a beginning only and, so long as the right sort of Indians come forward to provide officers and other ranks, there is no reason why it should not expand steadily and quickly until the R. I. A. F. provides all the air forces needed by India in peace. Until this comes about, it will be necessary in my opinion for India to supplement her own air force with squadrons of the Royal Air Force. I have watched the R. I. A. F. grow from the single squadron of less than ten years ago to its present strength. The name and fame of the R. I. A. F., young as it is, are already well established throughout the British Commonwealth, and I think that this is a most remarkable achievement in so short a time, and promises well for the future. Even with only ten squadrons, the R. I. A. F. like the R. I. N. will provide a fine career for the best type of Indian youth.

*In an address delivered on November 1, 1945 to officers at the Staff College, Quetta.

Let us now consider the Army. Unlike the R. I. N. and R. İ. A. F., the Indian Army is old and rich in traditions, and full of the accumulated experience of nearly two hundred years of war and peace. Tradition and experience are excellent in their way, but it is possible to put too much reliance on them. An Army, like every other living organism, cannot stand still; it must always be changing if it is to adapt itself to conditions in a World which is always changing, and changing with some rapidity, too. I would ask you to keep your minds open, and to look forward as well as backward. By all means keep what is good of the old, but do not let the old blind you to what is demanded by the new. Do not cling to a thing because it is old, but only because it is good. At the same time, do not force change for the sake of change, but only if by change you can improve on what you have got now. Those are the principles on which I try to work myself, and I hope you will do the same.

I will not try to describe in detail our outline plan for the post-war Army in India, but it will not, so far as I can see, differ greatly in actual size from the pre-war Army. However, I trust its composition and organization will be very different.

We are hoping to keep in our future Army in India an airborne division and an armoured division as well as other armoured units and, of course, Infantry divisions. It is my intention that these post-war divisions shall keep the names of the more senior of our divisions which have made such a wonderful name for themselves in all theatres in the recent war,—divisions such as the 4th, 5th, 7th and so on. These divisions will, I hope, keep their famous divisional signs as well as their famous names. We hope that in the future our divisions will be complete in peacetime with their transport, medical and other services, instead of these having to be hastily raised or improvised when war comes, as has been the case in the past. We hope, too, to keep our divisions concentrated in suitable areas, so that they can be properly trained and supervised by their commanders at all times instead of being dispersed in small packets over wide areas. In fact our principle is to concentrate, and to avoid the dispersion which is so detrimental to the training and efficiency of an Army in peacetime.

As you know, the Indian Army before the war was a badly balanced organization, in that it had a large number of cavalry, engineer and infantry units but very little artillery, except the mountain regiments which were kept up primarily for service on the North Western Frontier. That is now changed. We have to-day over sixty regiments of Royal Indian Artillery, of all makes of guns from medium down to anti-tank. The new Army will have its proper proportion of Indian Artillery regiments and the number of them will be considerable, probably approaching fifty of all types. We are at present desperately short of Indian officers for the Royal Indian Artillery, and I hope you will do all you can to persuade the right type of boys to come forward for commissions in this most important arm of the service.

So far as the Indian Armoured Corps is concerned, it looks as if it will remain more or less at its pre-war strength. It is not likely to be greater and it might be less. Its task will be to provide the units for the armoured brigades, and the reconnaissance regiments of the divisions. In view of the need to widen the base of recruiting and to spread it all over India, there will be changes in the composition of the regiments of the Armoured Corps. These changes are necessary in the interests of progress, and I look to you to help to ensure that this is understood by regimental officers and men and loyally accepted by them. There is also likely to be a substantial reduction in the establishment of officers of an armoured regiment, as this is unnecessarily extravagant at present.

Turning now to the Infantry, there will also be important changes. First, many new regiments raised during the war, such as the Madras, Assam, and other regiments will become a permanent part of the Infantry of the Line. This again is necessary in order to make the fullest use in war of our available man power, and must be loyally accepted as an essential change. The total number of Infantry battalions is not likely to be greater than the total existing before the war, and may very well be less owing to the need for expanding the artillery and administrative services. This being so, it will almost certainly be necessary to reduce the number of battalions in the older regiments of Infantry, but I trust that it will not be necessary to disband any of our pre-war regiments. This is another essential change which I ask your help in ensuring that it shall be loyally and cheerfully accepted.

As regards the Engineers, Signals, and R. I. A. S. C., there will also be changes in composition and organisation consequent on the major changes I have outlined. The Indian Army Medical Corps, which has developed into such an efficient organisation in so short a time during the war, has come to stay, and the Indian Army in the future is likely to recruit its own medical officers directly from civil life instead of drawing its officer requirements from the Indian Medical Service.

I will now refer to our plans for the future organisation of the higher command in this country. We are at present examining in detail certain definite proposals for the setting up in India of an integrated command, on which all three Services will be equally represented, under a Supreme Commander who might be a sailor, a soldier or an airman. Under him he would have a planning and advisory staff, headed by a Chief of the Operations Staff, and a Chief of the Administrative Staff, who might be drawn from any of the three Services. They would have under them fully integrated staffs of officers of all three Services. The navy, army and air force would each have their own Flag Officer Commanding, General Officer Commanding and Air Officer Commanding, with their own Service staffs to give executive orders which would be framed so as to give effect to the policy laid down by the Supreme Commander. I think that this is what India needs for the proper co-ordination of her defence, and I hope she may achieve it.

I would like to turn now to the question of the provision of officers for the future Armed Forces of India. I need not say much, as you will have seen the pronouncements of the Government of India on the subject, and you may have read what I have said myself on the subject recently. The point I wish to make is that though the object is the complete officering throughout of the Indian Armed Forces by Indians, this cannot be done at once or too quickly, unless efficiency is to suffer.

It has always been my policy to maintain the efficiency of the Army at its present very high standard. That will continue to be my policy for so long as I am here, and I hope that it will be the policy of those who come after me. In dealing with the promotion of officers and their selection for command and staff appointments, I have looked solely to efficiency and suitability, irrespective of whether an officer is Indian or British. I have never promoted or selected an officer simply because he is an Indian, and I never will. Much less have I chosen an officer because he happens to be British. Efficiency has been and remains the sole qualification, and I believe that no responsible Indian officer to-day would wish any other test to be adopted.

Efficiency comes from natural ability, knowledge, training and experience. It very rarely comes from natural ability alone. This being so, it is unavoidable that the progress of an officer to the higher commands and appointments

of the Army should be gradual and properly varied, so that he may gain that knowledge and experience which are essential in those who are to be responsible for the lives of their men in battle.

The pre-war Indian regular officers, who are unfortunately very few in number, are now coming rapidly into the zone of regimental and higher command, and very well they are acquitting themselves too. If there were more of them, the number of commands and appointments held by Indians to-day would be greater. But there are not more of them, and so we must wait until other younger Indian officers have got the knowledge and experience to fill these appointments. If we try to hurry the process unduly, in my opinion, we shall inevitably lose efficiency, and that I feel must be avoided at all costs. So for the time being we must use British officers to fill the temporary gap, and I hope that we shall get the best British officers for this purpose.

I would like to remind you that though the Indian Army to-day is one of the finest fighting services in the World, which has met and defeated in battle the World's best troops, it has taken nearly 200 years to bring it to this pitch of efficiency. We owe much to those generations of officers who have given of their best to bring about this result. Let us, British and Indian alike, not forget them, but try to model ourselves on them, so that we may keep this magnificent fighting machine at the highest pitch of efficiency.

The Indian Emergency Commissioned officers have done wonderful work in the recent war, but we have never been able to get enough of them. Of the many thousands who have come forward, only a very small proportion have been found suitable. This, I think, is due to the faulty system of education which has existed in India in the past. To put this right and to ensure that we shall have a sufficient supply of suitable Indian officers for the Armed Forces in the future, we propose to establish an Academy on the lines of the United States Military Academy at West Point, for the training together not only of officers for all branches of the Army, but also of officers for the R. I. N. and R. I. A. F. as well. Only in this way can really full co-operation and real understanding be made certain between the three services in war.

In the future, war will, in my opinion, be more than ever a matter of "combined operations" in which all three Services will have to work as one. The Academy will, in fact, be a university, and the cadets or under-graduates, as they might more properly be called, will receive a modern and scientific university education, and will, I hope, be granted a degree on graduation. Military training in its broadest sense will form part of this training, and all students will learn the responsibilities and tasks of all three services. The course is likely to last four years, and it is estimated that the Academy will need to accommodate between two and three thousand cadets. So you see, if our proposals materialise. as I am determined they shall, India should have one of the finest and most advanced institutions of the kind in the World. It is the intention to make the Academy a worthy memorial to those of India's fighting men who have fallen in the war fought to break the powers of Germany and Japan. It is a project which, above all others, is very close to my heart, and if you agree that it is an object worth advancing, I would ask you to give it your support in every possible way.

From the Academy the successful Army candidate will go for six months or a year to the appropriate school for the arm of the Service in which he is to serve—the Infantry School, the Armoured Corps School, the Artillery School, etc., and then will be posted to his unit.

It is our intention also to continue the joint education of the officers of the three Services at our future Staff College, and, of course, at the Imperial Defence College. Integration and co-operation to the fullest extent are the watchwords for the future, and I trust you will remember them throughout your service and impress them on all with whom you have to deal. We have in mind proposals which will ensure that an officer who distinguishes himself at the various schools and courses he will have to attend during his army career, shall receive credits which will earn for him accelerated promotion, and so encourage keenness and study.

I know that all of you are deeply interested in the scientific side of war. Indeed, it would be strange if you were not, as there is no doubt at all that science in the form of such things as atomic energy, radar and the like will play an ever-increasing part in future war, and this will demand from the officer of the future the highest possible degree of knowledge, efficiency, and readiness for war—for the war of the future is likely to come on us with terrible and astounding suddenness. If we are not prepared, it may well end in very rapid and utter defeat, before we have had time to remedy our unreadiness.

Our plans for the future will, I hope, provide fully for this scientific education of the officer, and also for the close association of the Armed Forces with the scientists and inventors from whom come the ideas which give birth to new weapons of war and the antidotes to them. This is essential if we are not to be left behind in the race, and I urge you all to do your utmost to keep yourselves abreast of scientific developments. The Fighting Services cannot live in watertight compartments. They are a part of the Nation, and must take part in all its activities and associate themselves with all forms of national thought and progress. I would be glad if you would do all you can to spread this doctrine wherever you may go.

Finally, I wish to urge upon you all, Indian and British alike, sailors, soldiers and airmen, the need for co-operation amongst yourselves—between each Service certainly, but also within each Service. Whether we are sailors, soldiers, or airmen, we speak of our "Service" and we think of ourselves as belonging to our "Service."

"Service"? The answer is simple really, because an officer spends his whole active career in the service of others, and it is well that we should realise and remember this. First an officer serves his country, and this should be above all other things in his life. Next he serves his "Service"—the Navy, the Army, or the Air Force, and it is of supreme importance that this loyalty to his "Service" should be above and over-ride his loyalty to his particular part of that Service, his ship, his regiment or his squadron. Every good officer will, of course, be intensely keen on, and jealous for, the name of his own particular unit, and it is right that he should be so, but he must never forget that it is only a part of the whole, and that efficiency in peace and success in war can only come through the closest co-operation of all the parts working together to one common end. This is often forgotten in peace and leads to unnecessary loss and failure in war. I ask you to do all you can to foster this loyalty to the Service as a whole.

It is difficult to say which particular form of service is more important than another, because there is no firm division between them, but there is no doubt whatever, that an officer's responsibility for the welfare and contentment of his men is of paramount importance. There can be no dispute about this; it has been proved time and time again in the history of the British and Indian

Armies. An officer must also place his men before himself—no sacrifice or unselfishness is too great for an officer if it will help his men. An officer may gain a great part of the confidence of his men by proving to them that he knows his job from A to Z, that he is skilled in war and physically brave and tough, but unless he can make them believe that at all times he honestly and wholeheartedly puts their interests and welfare before his own, he will never gain their full confidence. If he does not have their full confidence, he can never be a really good officer.

There are very few bad soldiers, but I am afraid there are plenty of not very good officers. Given good officers, it has proved possible to make good soldiers of almost any race on this earth, but even the best material will never make good soldiers unless they have good officers. So your responsibility as the future commanders of our fighting men is a heavy one. See that you discharge it faithfully and well.

In India to-day we have many races, castes and creeds, and the divisions between these are acute. I hope that time may heal these differences, so that India may come to fill her proper place in the World. However, I am not concerned to-day with politics, but with the future of the Armed Forces. The Indian Army is an old established Service, and in it, for many years past, it has never allowed considerations of religion or politics to interfere with its solidarity or efficiency. In all the welter of conflicting ideas and prejudices, it has remained steadfast in its loyalty to itself as a Service and to the State. This is no mean achievement. We have now reached a critical stage in its long story.

Henceforward Indians will steadily and progressively replace the British officers by whom in the past the Army has been built up. For some years to come, however, Indian and British officers must go on serving side by side in the same units and headquarters. Their object must be one and the same, namely to preserve the efficiency, solidarity and reliability of the Army. I know the story of the past only too well, and I have done my best to remove the causes of jealousy, mutual mistrust and suspicion which undoubtedly existed. During the last six years of war, British and Indian officers have learned to respect each other in the stress of battle and amidst the hardships of active service. I know they have in many cases learned to like each other.

There is no getting away from the fact that the Indian differs from the Briton and the Briton from the Indian in many ways—in thought, in custom and in habit. This cannot be helped, but given goodwill and a real spirit of co-operation, I am sure that these differences can be got over. I say to you they must be got over if we are to achieve the object which I have set before you—the preservation for the India of the future of one of the finest armies in the World.

It can be done, but only if each and all of you, Indian and British, will make up your minds to give as well as to take, and to practice a real unselfishness. Service is your watchword. The good of the country, the good of the Service, the good of your comrades—these should be your aims. Put them before your own good and all will be well, not only with the Services but with India.

You, the officers of the Fighting Services can and should point these ideals and set this example of co-operation and service to the country.

If you can do this, you will have deserved well of India.

PARACHUTING INTO MID-CHINA

BY MAJOR G. C. DAWSON.

EVER since Pearl Harbour, a small body of British Officers worked in the interior of China, running training schools for the Chinese Armies in the forward areas. At the beginning of 1944 the schools were at Pihu in Chekiang, but owing to Japanese activity that summer they had to move to Pucheng in north Fukien.

The line of supply to these schools was, first by air over "the Hump" to Kunming, then by road via Kweyang to the railhead at Tu Yun, followed by rail via Kwelin and Henyany to Liugang or Kukong, and lastly by road to the schools. This trip took a fortnight to three weeks, depending on luck and the weather.

In 1944 the Japanese push from Changsha down the railway almost reached Kweyang, and left us with an extremely awkward air hop over the Japanese lines to the U.S. air bases in Kiangsi. As a result a few personnel came and went, but no supplies of any description reached us.

In January, 1945 the Japanese sent columns to destroy the air bases at Nam Yung, Sui Chuan and Kanchow. Without supplies to maintain Chinese interest our schools could not function, and on January 28 we received orders to evacuate, leaving only skeleton staffs. The only vehicle at the school in working order was sent to collect our personnel from the forward Chinese units. All our transport was cheap U. S. civilian vehicles, assembled in Rangoon, with Burmese bodies. We brought them up the Burma Road with us in January 1942, and had managed to keep them going ever since, in spite of a complete lack of spares.

We were extremely lucky in having a man of great mechanical ingenuity to run our workshop. He was a missionary who walked out of Japanese internment in Shanghai in 1942 and joined us. Starting with one small lathe from H.M.S. Sandfiper he set up a workshop with local personnel and, by 1945, had a reboring machine of his own making, was smelting railway steel and even casting aluminium pistons, besides producing such minor things as gears and pieces of jeep transmission for us and the Americans in our area.

The day we received our move orders he had the remains of two vehicles, and within twenty-four hours he produced one that worked. At midnight on January 29, we left Pucheng, but were back within an hour for further engineering. We left again at six in the morning, and by driving for twenty-seven hours we made our neighbouring depot at Ning Tu, 400 kilometres away. At Ning Tu there was no official information, but this was quite a normal state of affairs. Local rumour and the Americans had it that the Japanese were in Kanchow. So it was decided to head for Chang Ting where there was an airstrip of sorts.

Having given our vehicle a day for repairs we left for the airstrip. The road was a minor one, narrow and rough with very bad hill sections, and that

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Miles.

area harboured over 200 active local bandits. By that evening we got to Jar Chin, but the last forty kilometres were over a mountain range with a pass at about 4,500 feet. This stretch was a military road with grades up to 1 in 5 surfaced in mud, and most of the bridges were gone. We went through one culvert but got out without damage, assisted by a lorry load of U.S. Navy. There was snow on the pass, but we made it with a lot of pushing and arrived at about five in the morning.

Chang Ting is in a winding valley between high mountains, with an airstrip that had once been used for some fighters. The U.S. staff from Kanchow had just arrived and was getting the place organised. The weather was cold and wet, inclined to snow with a ceiling well below the local mountains.

During our wait we had a short banditry interlude. A U.S. officer going down the road, we had just traversed was held up and his interpreter was shot. We joined in the rescue column in a jeep we had acquired. Later we found out that as the officer, his interpreter and driver had been slowly driving up a very steep gradient about 40 kilometres out of town, a shot had rung out, and a bullet went through the windscreen hitting the interpreter in the face. This shot was probably intended for the driver. After the shot about 40 men armed with rifles came out on to the road all round the jeep. These were bandits who stripped the jeep and the U.S. officer of all valuables, including half his clothing. He managed to talk them out of shooting him, and after a while they went back into the mountains. The officer turned his jeep round and brought the interpreter back for treatment, as he was seriously wounded, but his trailer had to be abandoned as it was too heavy to turn round single-handed.

Luckily for us the bandits had moved on, as a few jeeps on one single appalling mountain road would have been just too easy to ambush. We found the jeep-trailer, which was still full of wireless equipment; we also met one of our own lorries coming the other way. A tree had been felled across the road and it had taken them over four hours to clear it. As they were carrying four million dollars, the bandits were probably laying for that.

By February 9, the "Homing" (a form of radar for guiding a plane to an airstrip over strange country), was working and the weather had cleared a little, so two Dakotas were sent over and landed successfully. Luckily they had arranged for parachutes for us, because there were strict orders that each passenger must have a parachute. As they had lost eight out of the ten last planes to Kanchow it was a reasonable precaution.

We were put in the second plane, and were only allowed a pack each as there were two two-hundred gallon petrol tanks inside the plane. The plane took twenty-three passengers. We had the officer-in-charge of our supply line and a D. A. Q. M. G. from Chunking, two doctors, one R.A.M.C. and one Czech refugee we had collected from Wenchow, our signals officer, one of our convoy officers, five instructors from the school and the officer who ran our workshop. The Americans included a Pacific air ace, an Intelligence officer from our area and two Infantry officers. The crew consisted of a pilot and co-pilot, with a wireless operator and a crew chief. There were also a Chinese officer and two Chinese secretaries (sisters).

The town was about half a mile from the end of the strip, and we just cleared it. We had no trouble crossing the Japanese lines or from their airfields near Henyang, as the weather was too bad for their planes. Owing to a strong headwind we did not get to Chia Chiang till late in the evening, about nine o'clock. Here we were offered accommodation, but as we only had another 450 miles to go the pilot decided to gas up and go on. The two American infantry officers and the Chinese officer left us.

The take-off from here was rather rough, as the plane still had a lot of ice on it and the field was all mud and slush. As soon as we got going we ran into snow and climbed to between 19 and 20 thousand feet to get above it. At this altitude it got bitterly cold in the plane, in spite of the heating, while ice being thrown off the propellers made a terrific racket.

After about five hours some coffee was brewed up, and we opened the odd K ration, which was very acceptable. At 4.20 a.m., after some seven hours' flying, the crew chief came into our compartment and said, "Put your Chutes on". The sole reaction to this was annoyance at having to move a few feet, collect the chute and struggle into the harness. The shortage of oxygen and cold had a very noticeable effect; some people could not manage the effort and had to be assisted.

A few minutes later the crew chief came back from the crew compartment saying "Out we go". He pulled the emergency door inwards on to the floor and we queued up, getting out as quickly as possible. The curved ice-coated door on the floor did not assist, as it is essential to dive out and down to avoid the stabilizer. The crew chief stood by the door to ensure that no one hesitated, giving a push when necessary. As each body left the plane it made an uncanny noise like pulling one's leg out of a bog.

There must have been a five to ten-minute lapse between putting on parachutes and going out. Owing to lack of oxygen my brain was just not functioning, so I did not experience that tenseness of a few minutes to go. Nor did it even occur to me to open my pack and remove money, valuables and records. No one took anything other than what happened to be in their pockets. The crew had escape kits and emergency rations, but none were taken.

On leaving the plane I was struck by the slip-stream, which tore my hat off, breaking my chinstrap. This distinctly annoyed me, as I had expended a lot of energy fixing it. I did not count but pulled the ripcord just as soon as I considered myself clear of the plane. After a slight pause, the chute opened, wrenching me upright. I saw stars and took a few seconds to recover. This jar must have broken my watch strap, as I could not find my watch when I landed.

As we baled out between 19 and 20 thousand feet, it took about a quarter of an hour to come down. At first the sky was clear and full of stars, but as I descended, I soon came into the clouds and snow was coming up past me. One has the most incredibly lonely sensation with only the wind whistling in the rigging, no stars above, no lights below, only the snow coming upwards. About this time I started to swing; I pulled the rigging first on one side, then on the other, and wriggled about in the harness, but was unable to stop it.

All the time I was peering down hoping to see lights or any sign of the ground. Suddenly I saw some trees go past and I hit a steep mountain side

with my chute catching in some trees above me. After checking up that nothing was broken I tried to stand up, but the slope was too steep and slippery. I tould not get out of the harness as my fingers were frozen and would not work, so I just had to hang and thaw them out. When I got free from the harness I climbed up the rigging to the trees above me, unhitched the parachute, and as it was still dark I wrapped myself up in it and went to sleep, not waking till well after dawn.

I had landed near the top of a high pine and snow-covered valley, with some cultivation and a few buildings below. Making my way down I engaged a local farmer in conversation—not that I understood his dialect, but he was quite friendly and may have understood some of mine. After about twenty minutes two of our party turned up, the crew chief and one of our Chinese-speaking officers, who sorted things out easily. I had contacted the head man of the village, who sent out instructions that any of our party were to be brought to his house. I went out with guides and collected five more myself. Within two hours we had a party of twelve, including one of the girls.

At about midday we decided to move to a township some 15 miles away, but the paths over the mountains were so rough and slippery that we only made about five miles, stopping for the night at a farm where we dined off rice and pickled turnips, sleeping on the floor in our parachutes under a lot of straw.

Next morning we found the other girl, and moved on to the town of Shih Chien, where we were officially received. The magistrate was away, so his secretary did the honours. We also contacted some German Catholic Fathers who had a mission there. For "face" reasons we had to be looked after by the Chinese, but there is all the difference in the world between civilized company in a foreign-built house with good food, beds and bedding, and an official Chinese Yamen, a cross between a barn and a summerhouse, with paper windows if you are lucky, no beds, but a door on trestles, with a verminous quilt, requisitioned from some local, and very third-rate Chinese food at odd times, no washing facilities, and a crowd of guards, coolies and hangers-on, gazing in at all times. So we arranged for a few of us to stay with the Father, taking turns for a small number to have meals with them. The Fathers could not do enough for us, and we were all greatly indebted to them for their hospitality.

By the evening of the second day all the party had assembled in Shih Chien. The only casualty had been the pilot, who had sprained his ankle. There had been some very lucky landings, as the country was as mountainous as the Indian North West Frontier. There were huge gorges with sheer rock faces, and a great deal of rock outcrop rather similar to dragons teeth. One of our party landed on a bit of sand in a boulder-strewn river bed, another up to his neck in ice, mud and water in a paddy field. One was twenty feet up a tree, and nearly broke a rib when he cut himself down. Two passed within feet of each other, nearly colliding in mid-air. Both Chinese girls landed alright, one just alongside our youngest member. She lost her hat, scarf, bag, gloves and shoes; on the other hand, her sister came down with all these essentials.

For twenty persons, nineteen of whom had never even contemplated parachuting before, to bale out at night over this country and get away without a major injury was nothing short of a miracle.

The air routes over the interior of China are far from safe at the best of times. Although we had never lost any of our own personnel, quite a few in

the plane had already had unusual experiences. In Liberator over "the Hump" one had dropped 14 thousand feet down a valley and just pulled out at the bottom with the engines white hot. Two had crashed on landing. One had been on fire in the air, but the fire went out before they baled out. One nearly landed on an enemy aerodrome, but luckily some Japanese fired at the plane, using tracer when it was 20 feet off the ground with its wheels down. Strangely enough we only had two spare parachutes in the plane, in spite of leaving three passengers at Chia Chiang.

From Shih Chien we moved in two parties, as twenty was too many to feed en route. On our first day's move we went 20 miles to a town on a river, where we found an airfield, but no plane had ever landed on it and it was very boggy. The officer in charge put us up, which was lucky as it was now Chinese New Year and everything was closed down.

From here we went downstream in a boat through deep gorges and incredible rapids, arriving at Sze Nan, another country town; the local magistrate here looked after us very well indeed. We received information as to the whereabouts of the wreckage of our plane, and as we were carrying all forms of security mail, British and U.S., including consular mail, I organised a party of three to go and check it over. It was 45 to 50 miles away over the mountains; and we made this quite comfortably in two days. In places the going was very slippery as the snow was thawing at the lower levels, but it was still freezing up top.

The plane had broken up into small pieces, which were scattered over 400 yards of scrubby mountainside. It had been looted by the locals for five days, so there was nothing of value left. I did manage to retrieve a number of documents scattered about and buried in the snow. Some of these were very interesting—a map of the latest searchlight positions on Formosa, together with their organisation; there were U.S. Intelligence reports from Japanese-crashed aircraft, and an application from the British Consul at FOOCHOW for a pension for one of his gardeners as he had completed the requisite number of years with the consul on service; and last, but not least, I retrieved my hat from a Chinese soldier.

On returning to SZE NAN two of our trucks had arrived with some much needed stores. The Americans and ourselves had sent 17 messages to our various Headquarters by runner, wire and radio. The local communications were so inefficient that only two got through.

From SZE NAN to Tsun YI on the main Chunking-Kweyang road was 240 kilometres; this we covered in a day. Here the party split, the Americans going south to Kweyang while we went north to Chunking. We had a very reasonable farewell party at Tsun YI, but I missed it, as I had a relapse of malaria, and the following two days journey to Chunking were a bit a nightmare.

In Chunking we were well received by our Hq. who had given us up as lost. We were all granted 28 days' leave in India to recover and re-equip ourselves. I had to spend five days in Chunking, to recover from my malaria before I went on leave.

The journey by air via Chengtu to Kunming was uneventful, as was the trip over the "Hump" to Dinjan and Calcutta. After my leave, instead of flying back to Kunming, I was just told to bring a few trucks in from Manipur Road, but that is another story.

PREPAREDNESS A NATIONAL NECESSITY*

BY COLONEL E. C. V. FOUCAR.

"During the present war there have been certain limiting factors to the expansion of the armed forces of India as regards personnel, equipment and armaments. Consider in relation to any one, or all three services, in what manner they could in future best meet their peacetime commitments within the probable limitations of postwar finance, and at the same time form a sounder basis for expansion if the need should occur."

UNLESS and until the abolition of war is achieved, human progress must inevitably increase the frightfulness of armed conflicts between nations. Our own times have witnessed a nightmare growth; yet developments in aircraft, the harnessing of electrical power, improved lethal weapons and explosives must continue to extend the striking range and power of belligerent forces.

Recent wars have clearly indicated the trend. Not yet is the original German concept of *Blitzkrieg* a full reality, although the United Nations have improved upon it; but modern war has increased and will continue to increase the heavy penalty for national unpreparedness. Sooner or later this penalty must be no less than swift and complete ruin at the hands of the aggressor whose lightning stroke paralyses an unready opponent and ensures defeat beyond recovery. The instruments for such a mortal blow are within the reach of modern science.

These are general thoughts on the future, but they must form the background to any plans for national defence. The events of our time have merely served to emphasise once again a truth that constantly emerges, is readily accepted, then conveniently shelved when the vote-catching tactics of party politics again hold the stage. That truth is the imperative necessity of national readiness for war, a readiness distinct from deliberate preparation for an offensive campaign of conquest.

The only sure future basis upon which a country can build is undoubtedly that of universal service, although man-power alone is of little value. Sufficient arms and all the complex equipment of war, the means to ensure their continued production, men trained in their use, are essential requirements. . . . For reasons unnecessary to detail, compulsory service cannot be considered for India. Her defence forces must be made up of volunteers. She faces the future, therefore, under an initial handicap demanding most careful planning if the best use is to be made of the material available. With the many valuable lessons of the last few years as a guide there is no reason why India should not effectively develop her forces within the limitations imposed by finance and an adherence to the voluntary system. Although this paper discusses the future needs of the Indian Army, it should be remembered that much of the ground covered is common to the R. I. N. and the R. I. A. F.

The starting point for a survey of recent expansion problems must be an examination of the pre-war role assigned by Imperial policy to the Indian Army,

^{*} This is the winning essay in the 1945 Gold Medal Essay Competition conducted by the United Service Institution of India. Further reference to the Competition appears in our "Notes by the Secretary" feature. The subject set for the Competition is printed in italics at the head of the article.

the then state of that army, and the capacity of India to maintain it. Here lay the root causes of many of the difficulties arising in 1940 and subsequent years. From a study of these causes and of the situation that later developed it is possible to visualise the broad outline of a sound programme for the future.

In 1939, save for the small force of External Defence Troops, the Indian Army was not intended for employment outside India. The localisation of its role dated back many years, and with the wisdom of this policy we are not now concerned. However, it did have certain very definite results. No detailed plan for the systematic expansion of the army to its fullest possible extent in an emergency had been worked out and adopted between the end of the first Great War and 1939. Since Imperial policy did not take into account the use of India's man-power in time of need, such a plan was presumably considered unnecessary. Even the valuable experience of expansion gained by India in 1914—18 had vanished into the limbo of forgotten things. Did any record of it exist? At all events, no use of this experience was made from 1940 onwards.

The army itself was out of date. Let there be no mistake! The army was efficient, but efficiency alone is not enough. Wellington's veterans were most efficient, but they could not have stood against the better armed troops of a later era During a decade of financial stringency India's defence services had been stinted. Each year had seen a further falling behind in arms and equipment. Weapons were outmoded, and the revolutionary process of mechanisation that had set in elsewhere had not begun. The army was largely one of cavalry and infantry and mountain guns. Broadly speaking, there were no technical troops, and only a few British officers were acquainted with modernised equipment.

This situation was not viewed with equanimity, and the appointment of the Chatfield Committee was the first step forward; but before the recommendations of the Committee could be implemented war had broken out. The preliminaries for mechanisation had barely been initiated. Motor vehicles were few, new weapons and modern equipment were still things of the future, and the Indian Army entered the war under a heavy initial handicap.

Recruits at that time came almost entirely from definite well-tried classes. These had long military traditions and were of proved fighting quality. Most recruits, however, were uneducated, and their value for mechanised forces remained unknown. Although education formed part of a soldier's training, the average man acquired little more than a smattering of knowledge. There was therefore no large reservoir from which innumerable V. C. Os. and N. C. Os. could be drawn.

The officer situation was in process of change. Indianisation was a comparatively recent innovation. Not yet had there grown up an officer class of Indians. Shut out in the past from a career in the fighting services, the educated young men of the country still had their eyes on the other professions. Few of them came from families or parts of India with military traditions. Such a state of affairs can only change gradually, and India was still far from able to officer even her pre-war army.

Another feature of Indianisation was the proposed abolition of V. C. Os. Fortunately this radical change had made little progress, and the war years proved beyond doubt the very great value of the V. C. O.

India was unable to maintain a modern army from her own resources; her industries could not produce much of what was demanded. Many weapons,

much equipment, tanks and the chassis for all other mechanically propelled vehicles, numerous varieties of stores, had to come from overseas sources of supply. In the immediate pre-war years excellent work was done in surveying the country's essential needs in the matter of supplies, but no effect had been given to a great part of this preliminary survey.

Finally, there were the people of India, the vast mass of them illiterate and entirely ignorant of twentieth century progress. Many of these men were quite unfit for the ranks of an army or skilled labour; others could possibly be employed, but only after prolonged training.

It was against this background that the country entered the war in 1939. Here were the handicaps that must be overcome in the expansion of the army to be begun less than 12 months later. In the years that followed the relative importance of these handicaps changed from time to time, but all remained to a large extent, and all took their rise in the pre-war period.

What happened on the outbreak of war? One is driven to the conclusion that at the outset His Majesty's Government believed that the war could be fought and won cheaply. No great call need be made on India. Valuable time was lost, and, as we know, it was not until mid-1940 that the immensity of the Imperial task was realised. Even then the full appreciation of the contribution that could be made by India came slowly and reluctantly.

The initial lack of an accepted comprehensive plan for the expansion of the Indian Army did not help matters, and when the first steps were taken the machinery for expansion was not in readiness. Army Headquarters, as it then was, was not equipped to handle the great volume of added work thrust upon it. Had future developments been clearly foreseen, the preliminary stage must have been the enlargement of Headquarters. As it was, an undermanned staff struggled desperately with problems that grew in volume and complexity and threatened to overwhelm it. Inevitably, mistakes occurred, there were errors of omission and commission, and inexperienced officers had to shoulder great and unaccustomed responsibilities. That so much was accomplished, and well accomplished, is a tribute to the handful of senior officers upon whom the burden was thrown.

The main problems of expansion itself fell into two categories. Firstly, that of personnel; secondly, the difficulties of adequately arming and equipping the vastly increased army.

Stated in its broadest terms the personnel problem was that of countering the acute shortage of men who could be trained to become leaders or who had sufficient intelligence to learn the use of the complex equipment of modern war. This was certainly not peculiar to India, but it was for more acute here than in the industrialised and educated West. Less promising material had to be employed with a consequent lengthening of training periods and a less satisfactory output of efficient men.

As already stated, in 1939 the army was officered almost entirely by non-Indians. Upon expansion many thousands of Indians were commissioned, and an officer class of Indians arose. Yet the majority of officers remained European, most of these coming from the United Kingdom or sources outside India. These newcomers were handicapped by ignorance of the country, its people and languages.

Many expedients were adopted to recover or retain for the Indian Army every available experienced officer. In the raising and training of new units such men were invaluable. Furthermore, officers were required for numerous new duties such as intelligence, censorship, movement, transportation and a host of others. The demand for technically qualified officers was enormous. There was a grave lack of medical men.

Since many of these requirements had not been anticipated, deficiencies increased as expansion proceeded. The struggle to procure potential officers, to "cram" them by intensive courses, was endless. Had there existed in peace a cadre of officers trained to fill specialist appointments or to aid in the training of others, some of the shortages could have been more readily overcome.

The possibility of employing women in certain officer appointments and also for clerical and other tasks was not appreciated early enough. When it was decided to employ women the situation was not handled with breadth of vision; scales of pay were inadequate, and compared unfavourably with those paid elsewhere in India for similar work. In consequence the W. A. C. (I) did not attain the strength which it might well have done if accorded more sympathetic treatment.

The supply of suitable V. C. Os. and N. C. Os. was very short, and it was here that the pre-war class system displayed its greatest weakness. New classes were being enlisted; southern India became a recruiting ground of primary importance. At once there arose the question of instructors and leaders for these new recruits. Many men of the pre-war classes were intellectually unfit for promotion. Here was one difficulty. Another lay in the fact that the fresh classes were perforce trained by men they often regarded as foreigners, alien to them in customs, outlook in life, and language.

By a series of makeshifts the problem was tackled. Amongst other expedients there were transfers of V. C. Os. and N. C. Os. from one unit to another, even from one arm to another; British N. C. Os. were employed in Madras units of gunners in which English became the medium of instruction; there were special training schools and units for V. C. Os. and N. C. Os. Approved matriculates and other qualified men were recruited direct into these ranks. When possible, the militarisation of civilian personnel was undertaken.

An interesting innovation was the formation of boys units. In these units likely youths received the education and training calculated to fit them to become skilled tradesmen and leaders. The boys were taught English and, taken in hand at an impressionable age, were excellent material. The education of all recruits during their period of training was intensified to develop the abilities of the more able men who were speedily advanced. All efforts to hasten the production of V. C. Os. and N. C. Os. were of special importance for the new classes. These were greatly handicapped by their want of military traditions and service background, significant factors where, as in the Indian Army, competent leadership is such a vital matter.

Quite obviously expansion from classes normally providing a quota of recruits would have been much simpler. It had been objected in the past that classes would not mix; but recent war experience has proved this difficulty to have been much exaggerated. In newly-formed corps and units many classes have been mixed successfully. Furthermore, the R. I. N. and R. I. A. F. have surmounted the obstacle. In these services English is the common language, and it may be that this is the requisite solvent.

The adoption of English as the official language must be given serious consideration. A knowledge of English is imperative for satisfactory co-operation with British troops. In fact, the absence of a common tongue is a very real

source of danger in joint operations. All technical men must have some acquaintance with English, and technical men must be employed in ever increasing numbers. This brings us to another aspect of the personnel problem, the acute shortage of actual or potential technical men.

It has been customary to refer to India's vast reserves of man-power; yet this is a most misleading statement when the requirements of a modern army are considered. For such requirements India's reserves are strictly limited, a fact which emerged at a very early stage in the war. In 1939 India was in a poor state of industrialisation and, apart from those directly employed, there were comparatively few men capable of being trained in the handling of modern machinery and mechanically propelled vehicles. From the intellectually undeveloped masses could be obtained no artificers, M. T. drivers or others necessary for the operation of complex weapons or equipment of war. They could not provide the material from which skilled workers could be made for the numerous new factories and workshops that had come into being to assist the war effort.

With a demand far exceeding the supply there was keen competition for suitable men, not only between the defence services, but also with other departments of Government and with civilian employers. The latter were in the happy position of being able to outbid their competitors and to raise wages without the somewhat involved processes of putting up statements of case and of securing the sanction of Financial Advisers. The situation was much the same for clerical staffs, the posts to be filled far exceeding the number of men with any pretentions to qualifications. Once again, a system of makeshifts had to be enforced.

Standards were relaxed; in some cases drastically. Work and output suffered, but this was inevitable under existing circumstances. As skilled men did not exist in sufficient numbers they had to be brought into being, often from unpromising material. Yet the success achieved was remarkable. The formation of boys units has already been mentioned. The Labour Department undertook a very large technical training scheme, both for Services and for Government factories and departments. At the "Civmil" centres numbers of men were trained for specialised tasks. The assistance of the railways and other organisations was enlisted; the army undertook a further scheme to teach trades not taught elsewhere.

An event of primary importance, particularly for the recruiting of the clerical and technical classes, was the co-ordination of recruiting for all three services in December 1941. The Recruiting Directorate of General Headquarters then undertook the whole task; inter-service competition was eliminated, publicity was centralised, rates of pay could be more easily compared and harmonised, and by a system of priorities the service particularly in need of a special type of man was ensured preference. This step had become essential since the demand was so greatly in excess of the supply.

Turning now to the question of arms and equipment, it is evident that in 1939 and the succeeding years India was in a peculiarly helpless position. Dependent on supplies from overseas, she was compelled in the earlier phases of the war to go without the weapons and vehicles for her growing army. Undoubtedly the United Kingdom and the forces in active theatres had to receive priority; yet the starvation of India seriously affected the military situation since, after the British Army, the Indian Army was the largest in the Empire. Indeed, not only did India go without fresh supplies; she even went to the extent of stripping herself of equipment in her possession to assist the Imperial effort. It was a courageous course, but the right one.

This shortage not only prevented additional Indian troops being put into the field, it even seriously retarded training. Here training must be understood to apply not only to the men using weapons and vehicles in actual operations, but also to those who handle them behind the front line. The multitudinous technical stores issued by Ordnance are only readily recognised by men trained to the task; the maintenance of complex machinery and arms is a matter of careful training. Hence new equipment cannot always be issued nor effectively employed as soon as it is received. It has to be remembered, too, that with the standard of intelligence encountered in the Indian Army training periods had to be prolonged.

Despite these deficiencies of supply the Indian Army grew apace, and once again one must notice the splendid work done by regular officers. The magnitude of their effort is best evidenced by the fact that at the beginning of 1942 India had more divisions serving in active theatres of war than had any other army in the Empire. At that time, with Japan an enemy, Indian troops held the greater part of our battle lines.

In a paper of this length it is not possible to do more than indicate the many subsidiary aspects of expansion. The housing, clothing and feeding of the growing forces, the huge programme of works undertaken by the engineer services, and the immense transportation organisation that grew up were only some of these. From these and kindred subjects a variety of lessons emerged, the majority of them of too specialised a nature to be detailed here.

One provisioning lesson that was emphasised over and over again must be mentioned. In one form or another it must have been encountered by every Branch of General Headquarters. It was eventually learnt and applied, but the rigid procedure of normal times was not lightly discarded. Briefly, this lesson is the impossibility in time of war of following the meticulous financial standards requiring the allocation of almost every single item of supply to a particular target or work before sanction for it is accorded. Unquestionably, wasteful spending must be checked, and some financial safeguard is always necessary; but it is equally true that a detailed scrutiny of every item demanded might well mean pence saved but lives, or even the war itself, lost.

It took long to appreciate that each expansion target was not final, and that the Army must almost certainly continue to grow. Additional equipment would be constantly in demand; accommodation for troops and stores would have to be continually enlarged; installations would increase. The limited orders sanctioned in the earlier periods did not sufficiently consider all this, nor that the hazards of war must frequently delay the flow of supplies. As a consequence these were often short or not available at all on due dates. Meanwhile, other urgent demands for the same supplies had arisen.

Again, orders for what might be termed penny packets do not permit of long-term planning by producers, and planning on a comprehensive basis is a requisite for the maximum war effort. To co-ordinate supply, both for the defence services and for all other controlled demands, the Supply Department was created. This assisted planned production in certain directions.

The war effected a radical change in existing provisioning policy. Preconceived ideas had to be discarded and an entirely new start made. Undoubtedly much of the procedure that has been adopted is essentially a war measure and will vanish when the emergency is at an end. It is most important, therefore, that the experience of it, so laboriously gained, should be carefully preserved.

The foregoing is no more than a general summary of some of the major difficulties encountered in the expansion of the Indian Army; but it is enough to point the way for the future, and to indicate what preliminary steps should be taken ahead of another emergency. Of course such steps must be related to the limitations of post-war finance. Although it is difficult to conceive that we shall ever return to the narrow limits of the false economy prevailing before 1939, it is equally certain that financial considerations must bulk large in any measures undertaken.

In considering a future programme for the army its role must be defined. On the assumption that the post-war Indian Army will be required to maintain internal security, to protect India's frontiers and, should the need arise, to play a part in Imperial defence, the future programme would appear to fall under three heads. These cover the composition of the army itself; the development of India's industries and resources for its maintenance; and comprehensive planning for a possible expansion of the army and, in such event, the co-ordination of expansion with industry and civil organisations generally.

In the post-war composition of the Indian Army another rapid enlargement should be constantly borne in mind. The peacetime army must be both a striking force in itself and a sound frame-work for the larger organisation. Furthermore, the outworn standards of 1939 must be discarded. The trained soldier is now a skilled workman and should be regarded and paid as such. Man for man, the post-war army will be far more expensive to maintain than the forces in being six years ago.

The fact that modernisation is a continuous and unending process demands acceptance as a cardinal principle. The mistake must be avoided of again allowing the armed forces to fall into the dangerous obsolescence from which they had to be rescued after 1939. India cannot afford to risk once more the possibility of the critical defence situation that prevailed until late in 1942.

Recruiting should not be confined to the pre-war classes. It requires to be from all classes in the proportions in which they would be represented in an expanded army. With due regard for existing regimental traditions, class distinctions should be discouraged.

A higher standard of intelligence is necessary for recruits. The scientific methods employed by War Office Selection Boards have already been widely adapted and employed in India for certain classes of personnel. Extended and modified for the selection of all recruits, they would bring in the best of those volunteering for service. The continued recruiting of promising boys would ensure a nucleus of good V. C. Os. and N. C. Os. and the valuable boys training units initiated during the war should be continued in some form. Establishments for the training of V. C. Os. and N. C. Os. actual or potential, should also be continued on recent successful lines.

Within the army itself educational standards must be raised and rigorously enforced. Attention must be given to developing powers of leadership, every man being trained with the object of his being able to hold a higher rank in an emergency. The adoption of English as the official language has already been discussed. Such an innovation would almost certainly arouse much opposition, but if nationalist sentiment is to be appeased it will be at the expense of efficiency.

If modernisation is to be a continuous process, provision for technical training should always be in excess of immediate requirements. Since many Indians do not readily assimilate this form of training this emphasises the demand for ample technical schools.

The officer question has several important aspects. The aim must be to make India self-supporting, or nearly so, in the matter of officers in time of war. Peace establishments of officers, quite apart from leave reserves, should be somewhat in excess of war establishments. The value of experienced officers in the training of new units cannot be overestimated, and in war all surplus officers are rapidly absorbed. Furthermore, a small peacetime surplus of officers would ensure a better all-round standard of staff and specialist training.

The recent rapid growth of the officer class amongst Indians cannot be allowed to lose its stimulus. A vigorous policy of Indianisation must be undertaken. The early and overcautious scheme of segregation whereby specific units were Indianised was scotched by the war. Its demise goes unregretted. The Indian officer now stands or falls on his own merits, and for many of those who have made good in this war a permanent military career holds bright prospects.

The Indian Military Academy, doubtless much enlarged, will continue the training of officer cadets; but the time is now ripe for an additional establishment, an Indian Woolwich. This is essential if the army is to progress. There must also be facilities in India for post-commission training in technical subjects; whilst a system of frequent exchanges of officers for tours of duty with the British and Dominion forces should do much to keep Indian Army officers abreast of modern developments.

More schools are needed on the lines of the very successful Prince of Wales' Royal Indian Military College, Dehra Dun, not only to encourage the educated youth of India to become military minded, but also to develop the traits of self-reliance and independence of judgment so advantageous in every walk of life. There is no reason why such schools should not be wholly, or very largely, self-supporting. In any event, and quite apart from military considerations, they would play an important part in the life of the country. The University Training Corps deserve great attention in the post-war era. They could contribute substantially towards officer reserves.

Reserves of officers cannot be too large. In war they will soon vanish. Naturally Indians would form the greater part of these reserves, and specialised training must be arranged for the particular appointments for which officers are earmarked. Doubtless financial limitations will restrict the size of reserve forces, but it has to be remembered that reserves are one of the cheaper forms of military insurance.

During the war a variety of specialist units and organisations proved essential. Many such as those for the supply and distribution of petrol and oil, transportation, postal work, operation of refrigerating plants, and so on had little or no pre-war counterparts. They will be required again, and much could be done to provide for them by the raising of special Auxiliary or Territorial Force units from the railways and other civil departments of Government. Men employed by oil, shipping, and public utility undertakings of various kinds should be encouraged to join special units, the Forces just mentioned being regarded as the training ground for the reserves of experts immediately available in time of war. The necessity for such reserves is clear, and the Auxiliary and Territorial Forces afford scope for their organisation.

In the matter of accommodation for training and other establishments, and for depots and installations, the army should be well served for a long time to come. Much of the existing facilities must inevitably be scrapped, but those to be retained will probably be on the sites best suited to and with room for

another large scale expansion. Here, at least, planning for the future should not be very difficult.

The continued development of India's industries and resources is mainly a matter for the commercial community and the civil departments of Government. Recent years have witnessed vast strides, and the impetus given to industry by the war must be of great help in post-war schemes. No country, other than one with totalitarian and bellicose ambitions, can afford to concentrate in normal times on war industries; yet planned industrial development must take cognisance of national defence requirements. Thus, any country without heavy industries and unable to manufacture its own motor vehicles, aircraft, and weapons is at a tremendous military disadvantage. The possibility of a swift conversion of factories and workshops to war needs is always a point to be considered. There must be facilities for the training of large numbers of technical men since the demand for them during a major war is insatiable.

Space does not permit a detailed discussion of this aspect of the subject but it is plain that in matters affecting India's industries there should always be close liaison between the War Department experts and the civil departments and organisations concerned. That the Government is alive to the situation is evidenced by the recent creation of the Planning and Development Department, and the setting up of numerous panels to advise on future planning. Bounties, protective duties, and similar means of encouraging new undertakings are visualised.

Meanwhile, and until India has developed industrially, there remains the danger of her inability to arm and equip large newly raised forces. As the speed of modern war increases so will this danger grow. It must either be accepted, or the safer course adopted of retaining in the country adequate reserves of weapons, vehicles, and stores. There is no other alternative.

Planning is the last head of the future programme for the army. Plans for the next great war, uncertain in point of time, cannot be made only to be locked away and forgotten. They must be periodically revised and co-ordinated with changing factors. Continuity of effort and record are essential. Too often in the past has the dust fallen thick and undisturbed on an unremembered file of vital importance. However, it must not be overlooked that planning cannot achieve the impossible. The rapid expansion of an army must always be attended by problems unguarded against by the most careful forethought. Yet advance planning will reduce these to a minimum, eliminating many of the even less obvious difficulties.

A special planning staff, which need not be large, should be maintained at General Headquarters. Controlled by an Expansion Co-ordination Committee (the title is immaterial), it would consider the many varied problems for the next emergency, and guide all work on expansion. An obvious first step for this staff before considering the future is the careful sifting of the varied experience gained in the present war. Many recent problems must recur, and present day methods of approach will guide the planners. Thus, there should be little difficulty in laying down the procedure for the multiplying of existing units, in earmarking sites for additional accommodation of all kinds, and in providing for the adequate enlargement of General Headquarters in advance of a general increase in the strength of the army.

The expansion plan itself must be elastic, visualising progressive stages of growth, and covering the raising of any number of additional divisions. Such a plan including, of course, the continuous provision of arms, equipment, and

tores, both for the maintenance of troops themselves and for the large works projects to be undertaken, calls for detailed and careful thought if it is to stand the testing strain of war. One can do no more than indicate a few of the many connected problems that would confront the planning staff.

The manpower, and womanpower situation, demands periodic review. Varying industrial situations affect the availability of technical men, and the elimination of competition for personnel between industry, civil departments of Government, and the defence services must be ensured. A working arrangement on wage rates, the fair distribution of manpower quotas, and facilities for large scale technical training, are only some of the complex matters that must be settled in principle ahead of an emergency. It would be the duty of the Expansion Co-ordination Committee and its staff to assess all military demands and to place the army case before the board or other organisation set up by Government to handle this most involved question.

The whole subject of the employment of women should come up for reconsideration. Admittedly in India employable women are comparatively few; but in the present war the best use of them has not been made. The incorporation of women's services in the Auxiliary and Territorial Forces might be a sound preliminary measure for future planning.

Other matters would include plans for the militarisation of essential services such as those now within the Defence of India Corps and not to be covered by any Auxiliary or Territorial Force scheme; the raising of entirely new types of units which technical progress, changing standards of amenities, and so forth indicate as likely to be required in war; and the examination of war establishments and equipment tables for all new units to be raised. The importance of this last subject is sometimes overlooked, yet every minor amendment of an establishment affects the relevant equipment table, frequently disorganises Ordnances and other plans, and delays the readiness of a unit for active service.

Many of the duties that would fall to the lot of the Expansion Co-ordination Committee and planning staff were carried out at Army Headquarters in 1939 and earlier. There was, however, an essential difference. Problems were almost entirely considered in relation to existing forces. The serious implications resulting from a major expansion of the army did not arise, and co-ordinated thought was not given to the complexities of such a situation.

One need not elaborate further. It must be abundantly evident that the planners would soon find their hands full. Indeed, if established on modest lines, the planning staff would be unable at first to do more than concentrate on a few of the larger tasks. The main point at the moment is that the essential need for such a staff be accepted. Certainly it will cost money; efficiency cannot be secured on a "No Cost" basis. However, planning of itself is comparatively cheap, although upon the arising of the circumstances foreseen it generally proves to have been of inestimable value.

To recapitulate, the threefold programme outlined in this paper envisages an Indian Army of well selected men, kept up to date in training, arms, and equipment, and on the wide class basis that would allow for rapid expansion. Every encouragement must be given to the development of those natural resources and industries that would enable the country to equip and maintain her army. Lastly, there must be a planning staff to devise and keep in working order the machinery for the expeditious enlargement of the army in an emergency.

The penalty of unreadiness for war continues to mount, and the essential lesson can no longer be neglected. Readiness, even readiness upon a moderate scale, is expensive. Economy in defence measures, not once nor twice but many times, has cost the Empire vast quantities of treasure and literally hundreds of thousands of young and gallant lives. The fact that it is far cheaper to be prepared than to pay the defaulters price of an enormous sacrifice of blood and treasure is a truism we have consistently refused to accept. If the warning of recent years goes unheeded it may be that next time the price is even greater than blood and treasure alone.

This, then, is the situation confronting India. Before 1939 her Defence Budgets were considered an excessive burden; yet the cost of Indian defence to-day is upon an entirely different scale. In the post-war era the cost must fall, but if defence expenditure in India and for the Empire drops to the old level it will mean that the bitter oft-repeated lesson of unreadiness remains unheeded.

FLAME IN DEFENCE AND ATTACK

"Flame proved a devastating form of defence and attack during the war. Most elaborate of all schemes were the land and sea flame barrages round Britain. Long lengths of pipe lines stretched down the cliffs across the beaches into the sea. At a given signal the enemy crossing the water would meet an impenetrable wall of intense flame.

"In fields, roads and lanes leading inland from beaches ingenious flame traps were hidden. There was the 'Fougasse' an ordinary oil barrel concealed behind a hedge or bush, which at the touch of a switch would burst out a stream of molten fire for 30 or 40 yards covering passing transport with a shoot of flame. The 'Hedge Hopper' had the added charm of being able to hop over hedges right on top of advancing troops and then burst into a flaming mass that would burn for ten minutes. There was also the "cockatrice", a mobile form of weapon that shot curving into the air and caught low-flying gliders and paratroops in an embrace of fire.

"Most powerful of Britain's flame throwers is the 'Crocodile' which can project a searing tongue of fire a distance of 180 yards. One of the tricks of 'Crocodile' is to fire round corners; a peculiarity of the fuel causes it to ricochet and produce fire in crevices and corners of trenches and pillboxes."—V. E. Collings, Bureau of Public Information.

THINGS PEOPLE SAY AND WRITE

"Civilisation is self-discipline."—Lord Elton.

"Buckingham Palace was bombed nine times during the war."—Daily Telegraph.

"The England—Australia air service covers the 12,000 miles in 63 hours". —B.O.A.C.

"To be secure is not the purpose of life. Its purpose is to live."—Mr. Richard Law.

"Katanga Province in the Belgian Congo has large deposits of uranium ore." —Daily Telegraph.

"About 25,000,000 people will be homeless in Europe this winter."—Mr. Ernest Bevin, M. P.

"The average age of the Labour Party in the House of Commons is 43".

—Professor H. Laski.

"Financing the late war costhe United Kingdom about £20,00,00,000." —Mr. Oliver Lyttelton.

"A democracy must not seek to palm off its responsibilities on its leaders". Captain Quintin Hogg.

"I was not born with a hinge in my back. Few Britishers are."—Mr. George Young in "The Times".

"Between Berlin and Moscow civilised life has been almost completely wiped out."—Miss Barbara Ward.

"Five British bomber factories in Britain are now turning out prefabricated houses."—Mr. A. Woodburn, M. P.

"Both Britain and Germany used trained falcons to attack and destroy message-carrying pigeons."—News Chronicle.

"More than 2,000,000 Allied troops passed through South African ports during the war."—Statement issued in Cape Town.

"Nearly 50,000 men of Bomber Command died during the war out of 110,000 engaged."—Air Chief Marshal Sir Arthur Harris.

"Since V-J Day something like 4,000,000 people have changed their occupation in Great Britain."—The Prime Minister.

"Exports from Britain to Russia in 1945 amounted to about £3,40,00,000 against £1,70,00,000 in 1938".—Sir Stafford Cripps.

"Lives saved by atom bombs in the next twenty years may greatly exceed those lost through its use."—Professor A.M. Low.

"Belgium is the only European country not left with a debt by the end of Lend-Lease."—Mr. Kronacker, Belgian Minister of Supply.

"The domestic purchasing power of the pound sterling, taking 1914 as 20s., was 12s. 10d. in 1938 and 8s. 4d. in 1944."—Sir John Anderson.

"During the past four years the three flying boats of B.O.A.C. have travelled over 1,000,000 miles on trans-Atlantic flights without mishap."—The Times.

"We have the oldest, the most famous, the most honoured, the most secure and the most serviceable monarchy in the world."—Mr. Winston Churchill.

"The Netherlands stood by us when we were attacked by Japan, and they were, I believe, the first actually to declare war on Japan."—Mr. Ernest Bevin, M. P.

"When the end came in Burma the Japanese in the country had only 2,316 rounds for their small infantry gun—and this for two whole armies."—Army Observer.

"No army advanced so far as the Eighth Army in so short a time—from El Alamein to Austria—3,000 miles in 30 months".—Field-Marshal Sir Harold Alexander.

"The enlarged South East Asia Command includes 1,500,000 square miles of land with a population of 128,000,000 people."—Admiral Lord Louis Mountbatten.

"The Foreign Office has recently taken over the former German Embassy in Carlton House Terrace, where Ribbentrop once linked three houses together to form one".—"Sunday Times."

"The war criminals trial at Nuremberg is the first occasion in history on which men accused of criminal offences have been tried by an international court."

—Mr. W. N. Ewer, quoted by B.P.I.

"General Eisenhower used 91 Allied divisions to defeat Germany. They included 14 British, 5 Canadian, 60 United States, 11 French and one Polish."—
Mr. Stimson, U. S. Secretary for War.

"More than 100 U-boats which have been collected on the west coast of Scotland and off Northern Ireland are to be towed out into the Atlantic and sunk outside the 300 fathom line."—Daily Telegraph.

"The foundations on which we build our post-war civilisation must contain a good leavening of spiritual matter. If we build only on a material foundation we shall fail."—Field Marshal Sir Bernard Montgomery.

"An American film, book and lecture syndicate has offered General Eisenhower a million dollars for his autobiography and the film rights of his life story. His answer was: 'A million times, No'."—Don Iddon, Daily Mail.

"Instructions have been issued by the War Office that when the term Infantry' is used to denote that specific arm of the Service, it will be spelt with a capital letter".—Secretary of State for War, speaking in London.

"In European Russia about 26,000,000 are homeless, 98,000 collective farms are destroyed, well over 30,000 industrial enterprises completely wrecked, 17,000,000 cattle and 19,000,000 horses were removed to Germany."—Mr. Molotov.

"From 1940 to 1944 Britain lived on her capital to the extent of nearly £4,50,00,00,000, incurred shipping losses estimated at £23,00,00,000, and suffered air raid damage of more than £1,20,00,00,000."—Combined Production and Resources Board.

"Though America has about twice our tonnage of ships we still have our shipyards and our skilled craftsmen. We have good seamen, too, and in the long run it is the seamen who make a great maritime nation, not ships alone."—B.B.C.

"I know they will acquit themselves with the audacity, valour and resourcefulness which our country and cause now need."—Mr. Winston Churchill speaking of the 14th Army early in 1944.

"America transferred 138 of its small Navy surface craft to Russia under Lend-Lease before Russia declared war against Japan. Russian crews took over at a secret base in Eastern Aleutians between May and September, 1935."— Daily Telegraph.

"Prestige is to nations what credit is to business. It can be more powerful than material possessions, but it is a very sensitive and elusive asset, which can vanish in a night if confidence is shaken in a country's stability and good faith".—

Lord Templewood.

"The Labour Party Conference in Blackpool finished by singing the Red Flag and the International. I should have thought that for once the Socialists might have had enough pride in the British war effort to sing 'God Save the King'."-Captain L. D. Gammans, M. P.

"The experiences of the nineteen general elections held in Great Britain since the enlargement of the franchise in 1867, show that the popular vote in the country can be swayed by hope, by fear, or by resentment, but never much by gratitude".—"Sunday Times." London.

"Votes cast in Great Britain in the General Election numbered 25,037,107 out of an electorate of 33,064,704. The highest percentage of votes polled was 79, at Dundee, a two-member constituency; the lowest was 51, at the Northern Ireland University constituency."—"News Chronicle."

"I am not one of those who believe that there will never be another war. The utmost we can expect for a long time is that we may be able to reduce the risk of war and surround it with such dangers and difficulties that war will be regarded like crime in civilised society and become a rarity."—Field Marshal Smuts.

"A Burma Day should be introduced into the calendar to commemorate annually for all time the heroic exploits of the 14th. Army, the largest single army with the longest front in all war. I suggest May 5, the anniversary of the capture of Rangoon, as the appropriate date."—A correspondent in "The Observer".

"Science enjoys great prestige in Russia. In many fields its work and achievements are on a grandiose scale. This is especially the case in regard to geology and other branches of science concerned in the study of natural resources. The geological survey is on a scale at least twenty times as large as that in Great Britain or India."—Dr. Julian Huxley.

"Air speed attempts are filled with hazard. The speed of sound (760 m.p.h.) is now being neared; forces that limit the speed of sound are now coming into play against 'planes. There is the danger, if a still more thrust is given to engines as is planned, that the 'Meteor' will turn suddenly and unmanageably upwards or downwards."—"Manchester Guardian."

"Winston Churchill's greatness is unexcelled. His part in the late war reduces the classic figures of Rome and Greece to the relatively inconsequent stature of actors in drama of minor scope. Part of Churchill's greatness was unique, the union in him of doer and sayer, the gift of action with the gift of words. Churchill will be quoted as long as Shakespeare".—Mr. Mark Sullivan, in "The Reader's Digest?"

"At Prestwick, the Scottish aerodrome at which Atlantic-flying aircraft land, we have not had a non-flying day for ten years."—The Earl of Selkirk.

"In some thirty States in the U.S.A. the average teachers' pay for scrubbing the minds of our children is lower than that of the charwomen who educate the floors of Federal Service office buildings."—Robert Littell, in "The Reader's Digest."

"When Japan surrendered, Britain and the Commonwealth had, or were, deploying a land, sea and air force of no less than 3,500,000 in the Far Eastern and Pacific zone. Almost exactly half of these were United Kingdom personnel."

—The Prime Minister.

"I have been over the world constantly for 20 years, and I can say sincerely that I have never known a white people who have suffered so much and complained so little as the people of Great Britain."—James A. Fitzpatrick, of "Fitzpatrick Travel Talks."

"The jet-propelled 'Meteor III' at present in use by the R. A. F. has a range of only about one hour; the record-breaking "Meteor IV" burns aviation paraffix at the rate of 1,000 gallons an hour, or more than a gall on and a half for every mile flown at full throttle."—J. Stubbs Walker, "Daily Herald."

"The Japanese war memorial in Singapore was a high wooden commemorative column inscribed in Japanese. They destroyed it themselves recently. It is doubtful if it would have survived long. Australian prisoners of war had to dig the foundations. Each man, as he left the camp each morning, took a matchbox filled with white ants, which he carefully deposited on the site."—The London "Times."

"Three simple facts prolonged the duration of the late war: (a) research had for long been starved; (b) adequate steps had not been taken to maintain during the years of peace a nucleus of skilled men which could be rapidly and efficiently expanded for the purposes of war; and (c) that the system of departmental responsibility was not sufficiently flexible fully to meet the changed requriements".—Select Committee on National Expenditure.

"What is our task in Indonesia? It is first to disarm and concentrate the Japanese forces; second, to rescue and bring home our prisoners of war; and, third, to rescue the thousands of internees in camps throughout the island. We have no intention of using any British forces for any other purpose or against the inhabitants. Indeed, our efforts to avoid bloodshed have resulted in our being accused of weakness."—Mr. Ernest Bevin, M.P.

"During the last week of the war the Japanese admirals faced the gigantic United States and British armada with exactly one cruiser. The other major vessels in the register included one badly damaged battleship, three damaged aircraft-carriers, and two damaged cruisers. Japanese losses included 12 battleships, 15 aircraft carriers, 15 cruisers, 20 light cruisers, 126 destroyers and 125 submarines."—Statement by U. S. Navy Department.

"Only two major units of the German navy remain—the 10,000 ton cruiser Prinz Eugen and the 6,000 ton light cruiser Nuremberg. The 20,000 ton battle-ship Gneissenau is dismantled and scuttled at Gydnia; the obsolete 13,000 ton battleships Schlesien and Schleswig-Holstein were sunk; and the incomplete shells of the 10,000 ton Seydlitz and the 19,250 ton aircraft carrier Graf Zeppelin were abandoned."—Berlin Correspondent, "Daily Telegraph".

want of personal effort stayed the will of those whose job it was to receive those returned from Japanese hands. R. A. P. W. I. were broadly classified into the fit and the sick, and only in the persons who handled the fit was any differentation made between Service and Civil internees.

Probable times of arrivals of R. A. P. W. I. ships came from Embarkation H.Q. or from the N. O. i/c to sub-Area H.Q., whose responsibility it was to tell others of the arrival quay, time of disembarkation, disposal of personnel; also to call up transport, guides, kitcarrying fatigues, ambulances, stretcher-bearers, escort parties, bands, and arrange for flags and banners, loud-speaker vans, journalists, photographers, mobile canteens, and signals personnel (for the telegrams).

On entering the port R. A. P. W. I. personnel saw their arrival was not to pass unheralded; ships were all dressed over-all, and a veritable cacophony of V-signs came from the ships' sirens. Banners bearing the words "Welcome to India," in English and Urdu, were flown on the quayside. Military bands of the Madras Guards A. F. (I.), the 6th Battalion the Oxford and Bucks Light Infantry, and the bagpipes and bugles of the 3rd. Madras Battalion shared the duties of playing the ships in. When they stopped, the loud-speaker vans loaned by the Director of Field Publicity, Victory House, who was also responsible for the decoration of the quayside, took up the task.

Hosts of "welcomers" surged aboard immediately the gangway was fixed; they talked to the excited passengers while final details of disembarkation were worked out. H. E. the Honble. Lady Hope, wife of the Governor of Madras, was an indefatigable visitor; Major-General D. A. L. Wade, Area Commander, and Brigadier R. J. Mackay, Sub Area Commander were both prominent at these receptions, which were also attended by representatives of Service units and Welfare organisations, the Indian Red Cross, Indian Hospitality Committee, W. V. S., Salvation Army, Nuns, and local Government and Civic Heads. Other visitors have included Major-General Boucher, M.G.A., Southern Command; Brigadier Pearson, Director of the P. O. W. Directorate; Lieut.-Colonel Sevenoaks, of G.H.Q. (I); General Ballantyne, Indian Red Cross Commissioner; Lieut.-Colonel Standish, O. C. Recovered P, O. W. Mail Centre, and every sub-Area Commander in 105 Area. Personal messages from the King and Queen, and from the Commander-in-Chief, India were read over the ships' loudspeakers, in English and in the vernacular.

Disembarkation was swift yet orderly. A hundred 3-ton lorries, equipped with padded seats, took the fit men to Doveton College, Mackays Gardens, the Albany Leave Hostel, and Saidapet Holiday Home; fit civilians mostly availed themselves of private hospitality. Before they left the docks, each man was given the opportunity of sending a free telegram announcing his safe arrival, and could also partake of tea, coffee, a snack and cigarettes. Liaison officers mingled with the men, giving them news of their homes and families, details of pay, etc., while other officers classified the various groups to their correct Depots or Regimental Centres.

On arrival at their temporary home the men were medically examined, documented, fully equipped and paid. A hundred tailors completed the fitting of each man to measure as kit was drawn. Seldom more than 48 hours later they were on their way home again, either to Depots (I.T.) ports of embarkation (B. T.), or home (civilians). Special trains took the men to Depots, from which Conducting Officers had come for that purpose. B. T. who wished to fly home did so by direct arrangement with O. C. Air Trooping Centre, Arkonam.

Entertainment and amenities were lavishly provided. They included band and variety concerts, conjuring shows, special meals and loud-speakers for music and messages; musical instruments, cards and games, cigarettes (50 per man and a box of matches), pipes and tobacco, were distributed; a sum of money was handed to each man to cover meal expenses on his journey; B. T. received two bottles of beer each, while officers received two tots of whisky; and hundreds of magazines and periodicals were available. Mobile cinema shows were very popular.

Government granted Rs. 1 per capita for entertainment and welfare, while the Indian Red Cross gave a lakh of rupees to cover all other expenses. Doctors and nurses were posted to each camp and hostel, all of which were equipped with extra lighting, fans and telephones. Ten new Jeeps, with B.O.R. drivers, were at the disposal of officers, each of whom was interviewed by a representative of C.M.A., who in a short time was able to produce a rough yet reliable statement of accounts to date.

Those proceeding to colder climes were given extra warm clothing, and Government issues were supplemented by the Red Cross with gifts of pyjamas, towels, face flannels, toothbrushes, toothpaste, soap, shaving soap, razors and blades. Sick men were sent to Jallahalla Hospital Town; they were carried to waiting ambulances which took them to Royapuram Station, where the ambulances were run up a specially-constructed ramp to avoid them being carried more than necessary from ambulance to hospital train.

These hospital trains were excellent. Air conditioned and spotlessly clean, they provided a bed for each patient (up to 240 per train) together with sleeping gear; kitchen cars to cater for Indian or British tastes were attached; the Indian Red Cross supplied an extensive range of amenities, including note-paper, envelopes, pencils, games, sweets, chocolates, cigarettes, wireless sets and gramophones, and books and papers. Newspapers of all kinds and sizes were there, and as an example of the variety I would mention special issues of the News of the World which had been printed in Bombay, Home Gardening, and Comic Cuts.

Not only in the provision of amenities has R. A. P. W. I. every reason to be grateful to the Indian Red Cross, for that organisation must also be congratulated on its fine index-system whereby next-of-kin details by the thousand were tabulated and recorded, linking up the countless inquiries and messages with the nominal roll of each ships' arrival. Eventually the lists comprised four huge volumes, which were rushed aboard each vessel, where special rolls were made available for checking against these compendiums. Inquiries received were passed on without delay to Calcutta, Bombay and Colombo to form a well-nigh infallible four-fold cover against any information received. It was an enormous task, and well merited the tributes it received.

Over 20,000 R. A. P. W. I. have arrived in Madras to date. Those yet to come? No one really knows, but estimates range from 2,000 to 10,000. However many reach the port, they can rest assured that their welcome will be no less sincere and no less well organised than it has been for those who have already arrived.

Madras has every reason to be proud of what she has done, and all those who have helped in the welcome to R. A. P. W. I. can justifably feel that they have done fine work. To the Indian Red Cross and its workers and supporters, too, the grateful thanks of all those who suffered in Japanese hands will go out in full measure.

THE CAPTURE OF RANGOON—IN 1824

BY BRIGADIER ROSS HOWMAN, C.I.E., O.B.E.

THE wheel of history is ever spinning. One hundred and twenty one years ago our forebears were planning to capture Rangoon, but in their case only as the first stage of an amphibious operation which might have been unique in history. While not everything went according to plan, the Army and Navy were to work together as one team in notable amity, both in the greater enterprises and the smaller. Considering the personalities engaged—Marryat the great Naval novelist; both the Cottons: Henry Havelock: Lumsden, the father of two still more famous sons: Hayes of the Bombay Marine: and Pollock, the first officer of the Indian service to become a Field Marshal, were some—this was perhaps not surprising.

The first Burmese War was the outcome of a long series of irritations dating back to 1793. In that year the Burmese pursued fugitives from their rule across the frontier into Chittagong, and repeated this violation of British Indian territory in 1797, when 40,000 more people "unable longer to endure oppression" emigrated from Arakan. Similar depredations followed, culminating in 1823 in an attack on the island of Shahpuri at the mouth of the Naaf, when the Headman of Tek Naf reported "Ram Jeuren, Jemadar of the guard stationed at Shahpuri, came to me and the Subedar of the Tek Naf guard and stated that at midnight the Burmans, in number about one thousand, surrounded the Shahpuri stockade on all sides and began to fire on the party."

For years previously there had also been continual trouble, some serious, with Burmese raiding parties in Assam, Kachar and Manipur. Thus, when no notice was taken of the final remonstrance addressed to the Burmese Government after the Shahpuri incident, Lord Amherst declared war. This was towards the end of February, 1824, but Sir Edward Paget, the Commander-in-Chief in India, decided to wait until the beginning of the rainy season before beginning operations. His reasons, however, were far different to those which led Admiral Lord Louis Mounbatten in 1944 to break the rules for the second time and elect to fight, with conspicuous success, during the monsoon.

It must be appreciated that the ultimate objective of the operation was the Burmese capital of Ava, and that very little was known of the interior. Two or three British officers had visited Ava on missions, and a few merchants had penetrated branches of the Irrawaddy and seen something of the land from the water. That was all, but it was sufficient to enable the C-in-C to surmise the great difficulties of terrain and climate which would oppose an assault by land.

General Paget shrewdly summed up his conclusions by deprecating any overland expedition directed against Ava, for "in place of armies, fortresses and cities, I am led to believe that we shall find nothing but jungle, pestilence and famine." But the Irrawaddy offered a great water highway along which he believed, a flotilla convoying troops could ascend the 400 to 500 miles of river from Rangoon to Ava in about six weeks. The attempt was to be timed to start at the season when the volume of the river, swollen with rain, would facilitate a maritime expedition starting with the capture of the port of Rangoon.

The expeditionary force was placed under the command of Sir Archibald Campbell, a veteran of Seringapatam, Corunna, Vittoria and many another famous battlefield. To his A. D. C. and son-in-law, Captain John Snodgrass, who himself had fought in the Peninsula and at Waterloo, we are indebted for a first-hand account of the operations.

Amongst the British infantry in the order of battle were the Somerset L. I., South Staffords, Welch Regiment and Madras Europeans, who later became the 1st Bn. Royal Dublin Fusiliers. Few of the Indian battalions, drawn from the Madras and Bengal Armies, now survive; the forefathers of the 1/2nd and 3/2nd Punjab Regiments were exceptions. The Q. V. O. Madras Sappers and Miners were however represented by a battalion of Madras Pioneers. The total strength of the original expeditionary force was about 11,000.

The Naval part of the expedition, under Commodore Grant, Naval C-in-C on the East India Station, consisted of his flagship H. M. S. LIFFEY of 50 guns, and eight other H. M. and Honourable East India Company's ships. In addition there was the Penang Government cruiser Jessy, 19 armed brigs and schooners of the Bombay Marine, a flotilla of 20 row-boats, each armed with an 18-pr. carronade, and last, but not least, the DIANA, the first steam vessel ever seen in the East.

An interesting point regarding the composition of the military force is that the great bulk came from the Madras Army. This was due to the repugnance of the Bengal sepoys to sea travel, not attributable to caste prejudice alone, but largely to the still remembered loss at sea of a portion of "Gowan's Battalion." The ship carrying the flank companies of this unit, returning over 50 years earlier from the first war with Hyder Ali, had been lost without trace which "made a fatal impression on the minds of the Bengal troops with regard to sea voyages."* The long memory of the Indian soldier, of which many examples might be given, is one good reason for studying his past as well as his present and future.

The rendezvous for the two contingents was Port Cornwallis in the North Andamans. At this "romantic bay" the officers whiled away the time of waiting by frequent excursions, but failed to communicate with the inhabitants, who appeared to be "in constant motion in search of shell-fish" and responded to overtures by shooting flights of arrows at the boats, and retiring into the interior.

Calms delayed the concentration, and Campbell, growing impatient, would have sailed without the laggards but for the fact that the Madras transports had been insufficiently stocked with fresh water. This difficulty, he gratefully remarks, was speedily removed by the "indefatigable exertions of Captain Marryat of H. M. S. Larne." The fleet finally out to sea on May 5, sending two detachments to seize the island of Cheduba, nearly 400 miles due north, and Cape Negrais, about 200 miles to the north-east. To the purpose and fate of these detachments we will later return.

On May 10, the main fleet dropped anchor within the bar of the Rangoon River, some 15 miles below Rangoon, the winds being unfavourable and the tide on the ebb. It seemed fairly certain then, and the experience of released European prisoners was later to confirm it, that the arrival of the expedition was a complete surprise. Its arrival was, however, quickly announced by numerous beacons prepared by the guard and custom-houses and throughout the night points of blazing light were seen as the surrounding country took up the alarm.

^{*} History of the Bengal Native Infantry-Williams.

The 11th May dawned with a fair wind and no time was lost in pressing on up the river. After some miles an enemy two gun battery opened fire, but was promptly silenced by one of the men-o'-war. Shortly afterwards "from the intricate navigation and narrow channels through which it had to steer, every ship successively passed within a few feet of a thickly wooded shore, where a few expert marksmen might with perfect safety have committed the greatest havoc on the crowded deck." But the banks were silent, and it became increasingly apparent that the sudden descent had thrown the Burmese authorities into ineffective confusion.

At 12 noon, H. M. S. Liffey leading the flotilla reached Rangoon and anchored close to the main battery of some 16 guns at the King's Wharf, the transports anchoring in succession in her rear. Having furled sails and beat to quarters, Campbell and Grant awaited events and there was a pause of some minutes, during which no shot was fired. The enemy then opened an ill-directed fire on our shipping, which the Liffey's broadside quickly silenced.

Two brigades then stood by in readiness to land, one brigade to attack frontally and the other to push round after landing and attack the town from the rear. As these preparations were in progress the Burmese returned to their guns and re-opened fire, but were again silenced by a broadside from the LIFFEY. Campbell now gave the signal for the troops to land, which order boats crews and soldiers carried out in "most regular and workmanlike style." Twenty minutes later the British flag flew over Rangoon. A quiet and solid success, none would have thought.

There were known to be a number of British merchants and American missionaries in the town and an immediate search was made. Troops entering the town found three in the Custom House and filed off their irons. These men had a dramatic tale to tell. The previous night when the alarm was given the eight British and two Americans in Rangoon, together with an Armenian and a Greek, had been seized, fettered and confined in the Custom-house. They had then been repeatedly interrogated about the strength and intentions of the expedition.

Protestations that being "ignorant of the equipment, or intended departure of an expedition from India, they were incapable of giving any information" were unavailing. The captives were accused not only of being aware of the attack, but also of having concerted measures with the Indian Government to bring it about. They were sentenced to death.

"In their prison, the guards who surrounded them took a savage pleasure in parading and sharpening the instruments of execution before their eyes, in strewing the sand, and in making the necessary preparations for the work of death." At this critical moment, the Liffey discharged her first broadside and a 32 lbs. shot crashed into the Custom-house. The guards panicked, and abandoning three of the prisoners in their haste, dragged off the remainder.

Shortly after the capture of the town, the Burmese released an American missionary, Mr. Hough, from his irons and sent him with an emissary to the LIFFEY. The emissary had been ordered to enquire what terms the British would give, and to hint that the lives of those still in irons would depend on the answer. A firm reply was sent, but all responsible Burmese officials had meanwhile fled, and there was anxious speculation regarding the fate of the prisoners. At dawn, however, reconnoitring patrols discovered and rescued them, bruised, and still fettered, but alive, from two huts near the Shwe Dagon pagoda.

So far so good. Let us now return to the detachments of the expeditionary force given the island of Cheduba and Negrais as their objectives.

• The Cheduba force (two warships, two transports and detachments of the Somerset L. I. and a Bengal battalion) anchored off the island on 12th May. Following a "bold and very intelligent" reconnaissance by a naval officer, the troops landed in face of fire from musketry and swivels, accompanied by flights of arrows. After a brisk skirmish, the enemy retired within a stockade defended by six-pounder guns and swivels. which was eventually stormed with the aid of some ship's gun mounted ashore. Naval assistance did not end there, for seamen with ropes and axes accompanied the storming column, and Brigadier-General M'Creagh in his despatch had, understandably, "the pleasure to record the cordial co-operation I received from Captain Mitchell of H. M. S. Slaney for whose readiness in affording me every assistance his ship could supply, the service is importantly indebted."

Having made "such arrangements regarding the island as circumstances admitted" the S. Bengal Infantry detachment was left "in possession, and on the most friendly understanding with the inhabitants" while the remainder of the expedition re-embarked and sailed for Rangoon.

What was the object of this enterprise? Before attempting to answer this question we will recount the experience of the Negrais expedition.

This consisted of three ships and a Madras Light Infantry battalion under the command of Major Wahab, later greatly to distinguish himself at Rangoon and rise in time to General's rank. From his own account, the ships anchored off the Cape on 11th May, and next morning entered the adjacent river mouth with some difficulty. A party of troops was then landed unopposed on Negrais island in "the flat bottomed boat" and a beachhead established. At daylight on the 13th, parties explored the island with "indescribable labour through an almost impenetrable jungle, and up to their middle in water, without being able to see or discover anything."

The island being barren, supply was a problem, and a reconnaissance was made of the mainland. This drew opposition from a party of 800 enemy based on a hastily thrown-up stockade. Reinforcements were ferried across, but owing to difficulties of wind and tide were carried some four miles beyond their objective, and eventually landed just beside the stockade itself. A brisk action followed which left our troops "in possession of 12 guns, brass and iron, of various calibres, muskets, spears, and dhaos without number, from 40 to 50 boats, some of a very large description, gunpowder and balls, etc." The number of lethal weapons captured would seem to justify the remark that "our loss is so trifling (2 killed and 2 wounded) when I consider the means the enemy had of annoying us, that it can only be attributed to their fire being directed too high."

From the account of Captain Goodridge of the Hon'ble Company's cruiser MERCURY whose ship's guns assisted to cover the assault on the stockade, the island looked better from a distance, for he records "a plain of some extent, covered with grass on which I saw a number of cattle. The hills and other parts are quite woody." Major Wahab, on the other hand, after his journeyings ashore proclaims the island to have been "a barren desert covered with an impenetrable jungle" and, he continues, "it is evident from its desolate appearance that it has never been considered by the Burman Government to be a place of any importance, nor can it be made defensible by them, nor is there a village within ten miles of it on the mainland."

Major Wahab's dislike of his supply situation was intensified by the discovery that not only were the transports ill provisioned but that the subsistance allowance for officers paid to the commanders at Madras, had expired the day after anchoring. Some paymaster must have been "in the know." For such reasons of supply, combined with the setting in of the monsoon, he "deemed it advisable to remove his force at once to Rangoon" and duly did so.

What direct military value was attached to the diversions to Cheduba and Negrais is obscure. Probably none, and from Sir Archibald Campbell's comment is a despatch dated 1st June to the "Secretary of Government Secret and Political Department, &c., &c., Fort William" it appears that the ventures were inspired by a desire on the part of the Indian Government to put the wind up the Burmese Government. The despatch reads:

"I hope Major Wahab's evacuation of a place so little calculated for a military post may be approved of; indeed, I am fully of opinion that the object which the Right Hon'ble the Governor-General in Council had in view has been accomplished by reports of the simultaneous attacks upon Rangoon, Negrais and (I make no doubt) Cheduba, reaching the Court of Ava at the same time."

We left Sir Archibald Campbell at Rangoon in undisputed possession of the town but, in the words of Fortescue, he speedily found that "the capture of an oriental city too often means only the beginning of troubles." And so it was in the present instance.

Rangoon itself was the first disappointment. The flourishing commercial city of fancy was found to be, in fact, a vast and insalubrious assemblage of wooden huts confined within a high stockade which shut out all sight of the river. The Custom-house, the principal building, was fast tottering into ruins, and one solitary hull on the stocks marked the dockyard. Snodgrass, old campaigner though he was, found a new horror in war in the packs of dogs which effectually deprived him of his sleep "by their incessant howlings and midnight quarrels" and in all Rangoon found pleasure only in the lofty Shwe Dagon, rising in splendour and magnificence above the squalid town. Of a tank in the vicinity he however makes the cryptic, but obviously (to the wine of Scotland) uncomplimentary remark, that it was named "by the Rangoon settlers, probably on account of the sulphureous qualities of its water, the Scotch Tank".

It did not take the troops long to discover what brew the "Rangoon settlers" really liked when, on their first night ashore (though the officially inspired despatches and Snodgrass himself are silent on the point) they happened upon a cellar-full of brandy, the property of a European merchant. The glad news quickly spread, and a good time was had by all until the officers intervened and regretfully but firmly spilled out what was left of the brandy on the ground. Meanwhile, however, wavering and happy hands had accidentally fired some wooden huts with torches, and sober and disgusted sailors had to be landed from the fleet to help save the town.

Campbell's situation was in fact unenviable. With the monsoon fast approaching, he was master only of a few square miles of unhealthy territory from which the inhabitants had fled. He could collect neither supplies nor transport and, in the words of the loyal Snodgrass himself, his force had come "unprovided with the necessary equipment for advancing either by land or water." The whole plan of campaign had depended on finding, locally, sufficient water-transport to enable him to move up the Irrawaddy to Ava—and this

transport was not forthcoming. Worse still, the ships had been equipped with little more food than was sufficient for the voyage—and of this food the staples were (just think of it!) salt pork and biscuits which, in the Rangoon climate, speedily turned putrid or mouldy. A further cause for concern were the Burmese war-boats, not wholly to be despised by vessels at anchor and, more serious, their fire-rafts, which threatened to drive the shipping out of the river altogether.

It was evident that, for reasons of security and supply alike, the base had to be enlarged and the surrounding country penetrated. This was more easily said than done, for the Burmese had thrown an elastic cordon round Rangoon which, though capable of being forced at any point, yet possessed, in a high degree, the qualities calculated to harass and wear down the strength and energies of regular troops untrained in jungle warfare.

Under cover of the jungle the enemy threw up earthworks and stockades on every pathway and from these strong points stole out by night, attacking sentries, cutting off stragglers, and in general indulging in jitter tactics which kept the whole perimeter in a state of alarm. Fortescue remarks that "the men, until they became inured to these wiles were nervous and unsteady, firing at anything or nothing" and Snodgrass sums up the general situation by saying "Neither rumour nor intelligence of what was passing within his posts ever reach us. Beyond the invisible line which circumscribed our position, all was mystery or vague conjecture."

Whatever qualities Campbell may have lacked as a commander the determination to bring his enemy to battle was not one of them. He started with a small combined operation, directing the grenadier company of the South Staffords and the boats of H. M. S. Liffey, against stockades located at Kemmendine, some 4 miles distant from the anchorage. When about to land, enemy in a concealed stockade suddenly poured heavy fire on the boats. The naval and military commanders were of one mind. Since retirement "would have given high encouragement to the enemy, which we felt convinced you (Sir Archibald Campbell) would have highly disapproved" they immediately landed, soldiers and sailors together, and stormed the stockade with the bayonet, accounting for 30 of the garrison of some 400 men which fled. Two further stockades were similarly cleared by the soldiers and seamen who equally shared both the glory and the casualties. The latter included the naval commander, Lieutenant Wilkinson, who though severely wounded in the thigh insisted in continuing to command and cheer on his men.

Ten days after this spirited affair Campbell personally led out a reconnaissance in force. The rain fell in torrents, wetting the priming and making muskets useless, while the heavy, tortuous going so exhausted the labouring artillerymen that he was forced to abandon his two guns and press on after the retreating Burmese with four companies of British infantry.

While ploughing through paddy fields, inches deep in water, the column was suddenly surprised by heavy fire at 60 yards range from two cleverly masked stockades. With great promptitude Campbell launched a bayonet assault on the first stockade which was carried. The troops then reformed, as if on parade, and after a sharper struggle carried the second stockade also.

In war, audacity often pays, and it did then. But if the 8 foot stockades had been a few feet higher a bayonet assault without scaling ladders against a greatly superior enemy, who had been able to keep his powder dry, might well have had a different ending. As it was, mouldy biscuit and pork-fed men, unsuitably equipped, had to pay for a 20 mile march followed by a sharp action in a tropical downpour.

Indeed sickness was beginning to decimate the expeditionary force. Dysentery and scurvy were already rife, and malaria was taking hold. A month later an eye witness saw the camp as one vast hospital in which Europeans, sepoys, and followers alike were creeping about like ghosts, one and all in the grip of malarial fever. The European regiments had from two to three hundred men in hospital and the Indian units were little better. But Campbell, though his tactical ability as a leader has been criticized, had the gift of maintaining his men's morale in the most adverse circumstances, and his favourite recipe was to give them action.

Patrols and small raids, which brought him in sixty local craft (but unfortunately no crews) kept up the troops spirits while Campbell considered a more ambitious operation against Kemmendine. Here the Burmese had re-established a firm base of stockades, pointing to intended attack, and (which worried the Commodore) had also equipped a station for launching fire rafts against the anchored shipping. Yenangyaung—the "kyaung of stinking water"—had its uses in war.*

Accordingly, on 3rd June, three columns set out from the Shwe Dagon Pagoda, two by routes planned to converge at the enemy's "great stockade," while the third was to cut off their retreat. Campbell himself set sail with three companies which were to land and attack the river face of the position. The plan failed mainly through lack of attention to detail. The shrapnel provided for the camel howitzers (one wonders what they thought of it) proved ineffective against stout bamboo and teak stockades, which this time were fifteen, not eight feet high, and unscalable without ladders. The troops most gallantly tried to hoist one another over the top, and when that failed attempted to pull the stockade apart with their bare hands. They were shot down right and left. Earlier in the day two of our columns, confused by the thick jungle, had exchanged volleys and now, just as the Brigadier called his men off and they were reforming, the cruisers in the river misjudged the range of their ill-defined target, and poured round shot over the stockade into the midst of the troops.

On these latter happenings Fortescue makes an illuminating comment. "That the British troops should have fired upon each other was nothing extraordinary—indeed in woodland fighting such mishaps are the rule rather than the exception. That the guns of the ships should have played upon their own men in such blind country was nothing very remarkable." The other omissions were, however, as he trenchantly points out, less excusable.

A week later Campbell returned to the attack in a fashion which irresistibly reminds one of the second dream in "Duffers Drift". He had lacked scaling ladders—he brought a sufficiency; shrapnel had been ineffective—he brought great quantities of round shot; the infantry assault had been costly—heavy guns would blast the way for them, and so on. This was all very sound up to a point, and a small stockade was carried with little loss to our infantry on the way, but by the time the heavy artillery had methodically battered the great stockade it was dark, and the force spent a miserable night throwing up still more batteries in teeming rain. At dawn the artillery bombardment was con-

^{*} An eye witness records that these fire rafts were "ingenuously contrived, and formidably constructed, made wholly of bamboos firmly wrought together, between every two or three rows of which a line of earthern jars of considerable size, filled with petroleum, or earth oil and cotton, were secured, other inflammable ingredients were also distributed in different parts of the raft, and the almost unextinguishable fierceness of the flames proceeding from them can scarcely be imagined. Many were considerably upwards of 100 feet in length,—so arranged that when they caught upon the cable or bow of any ship, the force of the current would carry the ends of the raft completely round her, and envelope her in flames from the deck to the main-topmast head—"."

tinued for two more hours, then the storming parties advanced—and captured one old woman. The Burmese had decamped during the night, leaving some spipers in trees, and deception units in the form of yelling parties, to keep our troops as interested as a soaking jungle would allow.

Nevertheless, many commanders since Campbell's day have taken time to adjust their ideas to the condition of jungle warfare, and the capture of Kemmendine was a solid gain, for it gave some much needed elbow room. The only sufferers were an unfortunate detachment of the (later) Royal Dublin Fusiliers, which was left to share the first small stockade captured with 150 enemy dead and no tools to bury them. Some of the Fusiliers naturally soon joined the corpses—another minor example of the lack of attention to administrative detail which, even more than neglect of tactics and training, was our besetting sin in jungle operations until well into the late war.*

By now all components of the expeditionary force were more or less paralysed by disease, a fact of which their intelligence service had made the Burmese leaders fully aware. At the same time, these leaders were also well aware that when brought to action, the dash, discipline and gallantry of the British troops (which never faltered to the end) were too much for them. So they fell back on their old system of harassing tactics.

Consequently our sentries and pickets though becoming inured to jitter tactics, had a trying time. On the 25th June the war of nerves was extended to the fleet, for on that day an enormous fire raft consisting of some forty dugouts, lashed together and piled with petroleum soaked faggots, was launched downstream. Fortunately it grounded and burnt itself out before reaching the ships, which were hurriedly protected by booms against further assaults.

Towards the end of June the enemy attacked, but were decisively beaten off by three weak companies of Indian troops, who "received the attack with the greatest steadiness, not yielding one inch of ground." All companies in the force were indeed weak for malaria was rife, and Campbell could muster barely 3,000 men fit to fight. In spite of this, and disdaining the monsoon now at its height, he sallied out on 6th July to attack a growing enemy concentration at the junction of the Hlaing and Rangoon rivers. One column under "that excellent and indefatigable officer, Brigadier-General Macbean" was to assault the enemy from the landward side, while Campbell himself was to approach by water.

Macbean earned the epithet "indefatigable" that day, for though his men were in poor condition, vilely fed, and unsuitably clad, he led them many miles over water-logged ground to take seven stockades in rapid succession, and intercept and largely decimate a large body of Burmese flying from the fire of the ships' guns.

Campbell, it appears, had been understandably impressed at the taking of Rangoon by the devastating short range effect of the Liffey's broadsides and took council with Captain Marryat. The result was a fire plan which so successfully silenced the enemy fire and battered his main stockade that, within the hour, the "breach practicable" signal was hoisted to the main-mast head, when the appreciative troops entered the boats and led by Major Wahab (who we met before) assaulted and captured the position in the "best order and the handsomest style."

^{*}Wolseley's Ashanti Campaign of 1864 was perhaps an exception, See "Forest Warfare" by the present writer in the July, 1935 number of this Journal.

Campbell, true to form, was no sooner back in Rangoon when he addressed his customary question of those who brought him intelligence. "Where can I find the enemy"? The Burmese were, however, now showing signs that, for the time being at least, they had had enough, and the only body of which he could gain tidings was a small concentration of some 3,000 at Kaiklu, some 15 miles from Rangoon.

A force of 1,200 British and Indian troops were immediately ordered to move overland direct to Kaiklu, while Campbell with 600 more sailed up the Pazandaung creek, which ran almost parallel to the land approach. Floods however effectively stopped the land party, and of all the expedition the Diana steamboat with the General aboard alone reached the objective. Her progress was unopposed, for the sight of her belching funnel and thrusting paddles sent the few enemy seen "flying towards the jungle in evident dread and consternation." Several villages were however visited on the way up, where the General found and embarked some fugitive Rangoon families which he proposed to resettle in their homes. The local population soon gained confidence, and on the return journey on the third day the villages were crowded with curious spectators, "quite at their ease and saluting us as we passed."

This peaceful expedition shows the warlike Campbell in a gentler light, for he recorded on his return that "the favourable impression made shall be cultivated to the very utmost of my power, and happy indeed will I be to sheathe the sword as often as the object in view can be attained by kindness and mercy" which, in the circumstances, was a wise maxim for any general to observe.

The next adventure was an attack upon Syriam, where the Burmese Governor was assembling a force with, as it transpired, grandiloquent orders to block up the whole main channel of the river so that none of the "captive strangers" might escape from Rangoon by ship. Only 600 troops were embarked but, though ostensibly under command of a brigadier, Campbell would not be denied the outing. The Burmese had cleared and scarped the old Portuguese fort (from which a Dutch and two Portuguese or Spanish cannon were later taken) and had suspended huge teak logs above the parapet, where they could most conveniently be dropped on our scaling ladders during the assault.

The troops landed under supporting fire from the Penang Government brig Jessy and the Powerful sloop, which had been armed with mortars. The van was checked by a deep unfordable nullah, but here Captain Marryat with two boats from H. M. S. Larne took a hand. The seamen, though exposed to a galling fire from the fort, speedily knocked together "a very tolerable bridge" over which the troops swarmed and stormed the position.

While mopping up continued, a party of Dublin Fusiliers attacked the Syriam Pagoda, which was strongly fortified and held by 300 enemy and 4 guns. Lieut.-Colonel Hastings Kelly, in command, reported that on his arrival he "found the enemy inclined to dispute the possession of their almost impregnable post" but the menacing bearing of our troops as they steadily scaled the long flight of steps leading to the pagoda was too much for the garrison, which after firing a few shots precipitately fled.

Four days later Hastings Kelly was entrusted with the task of dispersing a further enemy concentration located at Dalla. Four hundred troops and seamen, the latter drawn from H. M. S. LARNE, had rowed up the Dalla creek for only two miles when they unexpectedly fell in with two strong stockades which commanded a narrow stretch of the channel. Kelly immediately decided to attack the larger stockade, from which a heavy fire was being directed on the

boats. A landing was effected with some difficulty through "remarkably stiff and thigh deep mud", the scaling ladders were placed, and the stockade carried. Meanwhile, the Bombay Artillery kept up so effective a fire on the opposite stockade from row boats armed with 18 pr. carronades, that the troops who were re-embarked and sent across to the assault had an easy task.

It seems clear that on this occasion Campbell was deceived by deliberately false intelligence. Captain Marryat comments that had it not been for the great dash and gallantry of the troops and seamen our losses would have been much more severe, for the stockades had been specially built of heavy baulks of teak and were excellently placed for an ambuscade where "the assailants had every natural difficulty to contend against." As it was, we suffered over 50 casualties, including one which is perhaps unique, for it appears in the Deputy Adjutant-General's list of wounded under the heading "General Staff." It reads:

"General Staff. Mr. H. L. Maw, R.N., midshipman, H. M. S. LIFFEY, Acting Wing Aide-de-Camp to Brigadier-General Sir Archibald Campbell, severely."

It is pleasing to record that this young naval officer, of whose "conspicuous and forward gallantry" (Campbell afterwards wrote) it was "impossible to speak too highly," recovered from his severe head wound and, after further varied service, died peacefully in London at the ripe age of 73.

After this last setback, the main Burmese army fell back to Donobyu, some 50 miles north and west of Rangoon, and Campbell (still lacking river transport) had at last to give the monsoon best, and settle down with the best grace he could to wait for October, and the end of the rains, to allow him to get at his enemy again. If, however, he could not attack by land he could attack by sea and on the 20th August he despatched an expedition to Tenasserim, which captured Tavoy and Mergui.

This was greatly to benefit his men, so scourged by sickness that "even those who still continued to do their duty, emaciated and reduced, could scarce crawl about." We have it on the authority of Snodgrass that when the doctors visited Tavoy and Mergui they immediately demanded them as convalescent stations, and "the result fully justified the most sanguine expectations. Men who had for months remained in a most debilitated state at Rangoon, rapidly recovered on arriving at Mergui, and were soon restored in full health and vigour to their duty."

Rangoon was to suffer one further serious assault, launched on the 2nd December 1824, when "the Sepoys, with unwearied constancy and the noblest feeling, even declined leaving their posts, or laying aside their muskets for the purpose of cooking, lest it should give an advantage to the enemy, and contented themselves for several days with little else than dry rice for food." Eventually; it was not until the 11th February, 1825, that Campbell was able to set off northwards, with provision boats (manned by imported Mug boatmen) following him up the river. It was not until 13th February 1826, after a final hard fought action, that two liberated British prisoners came to his camp at Pagan and announced that the King of Ava had capitulated.

General Paget, the C-in-C. in India, had estimated that Ava could be taken six weeks after the fall of Rangoon. In fact it took a year and nine months. The fault did not lie in the plan, which was imaginative and might well have been possible; it did not lie with intelligence, which after the early

days, and except at Dalla creek, was very reasonably good; it certainly did not lie with the troops and seamen, British or Indian, whose gallantry and discipline under the most trying conditions was superb, or with their officers, who set a consistently fine example, or with Campbell himself who, whatever his faults, possessed an iron nerve, high moral courage, and above all that divine spark of leadership which men recognise and follow.

Although the casualties from sickness were appalling, the fault did not lie with the doctors, whose knowledge and drugs was simply those of a century ago; it lay with Administration, which in 1824 sent an expeditionary force to Burma "unprovided with the necessary equipment for advancing by land or water"—Administration which in 1945 has, with the aid of air supply, made all things possible in the same land.

A "D" DAY SECRET.

How did the Allied Fleet cross the English Channel safely and undetected on the night of June 5, 1944? The story was recently related by a B.B.C. war correspondent, Alan Melville, who said:

"Around 6.30 on the evening of June 5 'B.202' slipped quietly away from her anchorage off the Isle of Wight, took her place neatly in the invasion fleet, and set course for Normandy. None of us knew quite what to expect. But nothing happened. We and the rest of the invasion armada crossed that 90 miles of Channel without a single attack from the *Luftwaffe* or from "E" or "U" boats. It might have been a Sunday sail on the lake. Now we've been told why.

"We crossed without interference because of something called R.C.M.—Radio Counter Measures. Further up the Channel a lot was happening. 105 R.A.F. machines, 34 little ships, and the accumulated experience of five years' work on R.C.M. were combining to bring off the biggest hoax in military history. The little ships steamed towards the Pas de Calais in two convoys, 18 towards Boulogne, 16 towards Calais. Above the Boulogne convoy Group Captain Cheshire, V.C. led his squadron slowly circling round the ships, gradually getting nearer the French coast, and all the time dropping 'windows'—thin metallised strips which produce a false echo on a Radar screen and hopelessly upset plotting.

"They dropped 12 bundles of "window" every minute for three and a half hours. The same thing was done with the Calais convoy. The German radar was given the impression that two colossal armadas were approaching the Pas de Calais coast. Between those two armadas more Lancasters patrolled up and down, jamming the enemy radar with 82 airborned transmitters, and hoping to lure the enemy night fighters up, while behind, nearer the English coast, more aircraft set up a permanent screen. To complete the deception we carried out two spoof airborne drops, dropping dummy paratroops, and more 'window' to make the drops twenty times bigger than they really were.

"It worked like a charm. The Hun mistook the Boulogne diversion for a genuine threat, opened up with all its guns and searchlights, sent out its 'E' boats, and put up the bulk of its nightfighters to engage the patrolling Lancasters. They fell for the airborne drop, too. Their radar system was reduced to chaos, and meantime we crossed to Normandy in a calm that was almost boring."

THE E. C. O.-AN APPRECIATION

BY BRIGADIER J.F.R. FORMAN, C.B.E., I.A.

RECENT statements have proclaimed the forthcoming break in the connection of the British officer with the Indian Army. The advent of this decision had long been expected, but its coming makes the fait accompli no less sad. Modesty forbids a regular I.A. officer from saying too much about the unique relationship between B. O. and Sepoy. Suffice it to record that the results have proved its success. I hope that some one with no personal interest and an abler pen than mine will find time to pay tribute to the partnership. It should be done.

But it is of another kind of officer that I wish to write to-day—the E.C.O. Most of these officers, including those who would have liked to serve on in the Indian Army as regulars, will now retire to civil life. The I.A., and the Empire, owes them an incalculable debt. A tribute is due to them. Hence this inadequate article.

As everyone now knows, the peace-time cadre of officers in the I.A. was totally unable to meet the expansion undertaken during the war. E.C.O.'s and I.E.C.O's were commissioned in large numbers to fill the gaps. The E.C.O.'s were of all types, but mainly of four categories: young, and not-so-young, men in business in India; soldiers commissioned from the ranks of British units; volunteers from amongst officers of British units at home and abroad; and boys straight from school. All have provided their share of successful officers, but it is perhaps, those of the first category who are most to be commended. They' were the first to arrive in units. Most of them volunteered for service at once, many giving up lucrative employment which they could have held on to for months, years or even, in some cases, throughout "The Emergency" (save the word). Being the first, the majority were soon in positions of great responsibility, commanding squadrons, batteries and companies in operations.

Three and four years ago, how common it was to hear a C.O. say, "Do you know, I've only got two (or three or four) regulars. What AM I to do?" You never hear that now. It is rather, "How the devil am I going to carry on with A off on repat and B and C on release?" A very different kettle of fish. The doubted are now the indispensable, though luckily the C.O's will find they are wrong—again no one is indispensable. Even so, what they say shows the worth of the E.C.O. It is these men who are very largely responsible for the splendid success of the Indian Army in such different theatres of war as Burma, the Middle East and Europe. It is they who have led comparatively raw troops to victory against the patently brave and efficient soldiers of Germany and Japan, in spite of early reverses.

A large number of them have been deservedly decorated. Many, alas, have given their lives. And all this with little hope of personal advantage, since they are but the amateurs of war. Their success in action, their decorations, their wounds, their impaired health will not earn them promotion in Clive Street or the tea-gardens of India, nor help them in the factory or the bank in England; their skill as tacticians will be of little value to those who are starting on their civil careers at the age of 24 or 25 with no other training behind them.

Nevertheless, something they have got to take away with them, and I fancy its exactly what they want. They have the knowledge that they are proved

leaders of men, that not only have they faced danger and conquered fear themselves, but that they have led their men to do the same. They have earned the trust of their men—usually their affection too. With the minimum of personal gain as incentive, they have the satisfying feeling of having done an unpleasant job well. For what its worth, they have earned the respect, admiration and gratitude of the regular officers. They have written for themselves a page in the Indian Army's Book of Fame.

This is an appreciation of the British E.C.O. Another could, and no doubt will, be written about his brother-in-arms, the Indian E.C.O. But I have not included him as he, if he wishes, may stay on to serve his regiment and his country. I know, however, that I am speaking for regular and E.C.O. when I say I am sure the future of the Indian Army is in good hands.

"WHAT SORT OF PEOPLE DO THEY THINK WE ARE?"

The following story, which we reproduce with acknowledgments to *The Army Quarterly* and to the Embankment Fellowship Centre, supplies the answer to the above question, once asked by Mr. Churchill when addressing the Canadian Parliament.

A certain N.C.O. was taken prisoner at Dunkirk. Later he escaped, and was free for seventy-two days, which freedom he thought was well worth the punishment. He was then sent to Poland, which was "a little bit of hell", but the Germans treated our men better than they did the Poles and other prisoners, especially the Russians. Every time this particular N.C.O. paraded for a work party he used to make his guards wild by giving "Heil Churchill" with a typical British Army salute.

When the Russians got near the camp last year he again got away. He had learned to talk German, and when he reached the Russians they wouldn't believe he was English. So he was put in a cell and it was about a week before he was accepted as British. Then they treated him excellently. But the Germans counter-attacked and he was again taken prisoner.

This time it was the Germans who wouldn't believe he was British. The commandant of his new camp called him a "dirty bolshevik swine" and spat in his face. Whenever he was interviewed to find out who he really was he saluted correctly and gave his "Heil Churchill". That seemed to convince the Commandant at last.

Later he was on the forced march back to Germany, sleeping in the open, with no cover, no overcoat and only a raw potato or two each day for food. Ultimately he reached another camp and was made to work again. The commandant said one day: "I can't understand you English. Every day you turn out with your uniforms smart and brushed, and your boots cleaned; and you fall in and march off to work as if you were on the parade ground". To this our N.C.O. friend replied: "Heil Churchill".

At last the prisoners heard that British tanks were near. The Germans got into a panic. When the Britishers heard the tanks coming they got hold of the commandant. One man said: "That's a nice shirt you're wearing; I want a shirt' and took it off him. Another, liking the look of his trousers, took them too. By the time they had finished with him he was as naked as when he was born. He was then tied to the post to which prisoners used to be tied and encouraged to say: "Heil Churchill". But he went so blue in the face that they thought he was going to have a stroke.

The N.C.O. says that day was worth living for.

HOMEWARD BOUND

By C. R. S.

IT was raining hard when we reached Deolali, but it was cool and our kit was intact. Thoughts of taking a family home—a wife and ten-year old son—and combining it with a spell of 61 days leave in the U.K. had for some time been disturbed by much idle talk and rumours of discomforts en route. The feeling that "Is it really worth it yet? Wouldn't it be better to take leave in India instead?" persisted.

But my wife had been very ill; the boy ought to have been at school at Home; orders had been received to report at Deolali by a certain date; and I had been granted permission to accompany them by sea. So, trying to forget all the things we had heard we had stepped forth with firm upper lips, prepared for the worst.

It is with the object of trying to dispel such thoughts from the minds of future travellers that I recount our experiences. I do so, too, with expressions of gratitude to all who were in any way connected with the arrangements. Some may say I was lucky. But was it luck? I leave you to judge.

As I have said, it was raining in Deolali. The elements, however, are not controlled by Depot Staffs, and one cannot blame them for the damp and mud. The Camp was pretty crowded, and quarters not of Mayfair standards. So far as I know, local authority was not responsible for the rate of flow of personnel into the Camp, and even if they were the best co-ordinated scheme can be completely thrown out of gear by delayed arrivals (and consequent delayed departure of ships.) Accommodation was cramped—but if the baby next door would cry half the night, whose fault was it? Certainly not the staff's. Anyway, we were on our way Home, and a few inconveniences could be put up with.

Let me add that I know nobody on the staff of the H.B.T.D. and I have no axe to grind. I merely want to give credit where it is due. A very fine piece of administrative work was being done. All members of the staff were at everyone's beck and call; they cheerfully attempted to overcome every difficulty and to please everybody. They were in the unenviable position of seeing everyone else in the Camp going off Home, when they couldn't go themselves.

After eight days we left by train for Bombay, arrived about tea time, and got the first much-awaited glimpse of our ship. Once on board there was no getting off again, so it was essential that one got all one's business settled before going up the gangway. So far as I was concerned, a couple of hours of struggle sufficed to ensure that all my baggage was intact, "cabin" luggage on board, tickets obtained, money changed, etc., and we were all set. Meanwhile, ladies in the canteen were ladling out cups of hot tea or glasses of iced drinks. Those ladies worked for many hours, and their services were very much appreciated.

Our ship, the "Capetown Castle", had done much troop carrying. That was evident from the innumerable carvings of names and dates on almost every inch of the deck railings. She had been built on luxurious lines. First-class

accommodation ranged from cabins-de-luxe to a dormitory capable of housing 380 officers. The former were nicely wall-papered and carpeted, and had private dressing rooms and bathrooms; they were naturally reserved for nothing less than really senior "brass-hats", though I noticed the S.M.O. had managed to snaffle one! In the latter there wasn't room to swing a cat, and it accommodated many of the more junior single officers. This dormitory was originally the First class lounge, and its use as a dormitory considerably reduced recreation and sitting space.

There were other types of accommodation, chiefly two-berth and four-berth cabins. The children's playroom had been converted into a largish dormitory for children's nurses. My wife and I were fortunate in getting a two-berth cabin, and on the floor (on a ship's fat mattress) we also squeezed our young son; he and another boy had relinquished their places in a two-berth cabin to an elderly Major who was not too fit. Many families were housed in these comfortable cabins, but not all. One unfortunate family, a Lieut.-Colonel with wife and four children, was distributed over three if not four cabins, and the wretched mother had the deuce of a time checking up on her family and satisfying herself that they were still on board.

We sailed at 4 p.m. the following day. Fortune favoured us and soon we were rushing along at a good speed in a comparatively calm sea. Rumour had it that it was the Captain's last trip and that he was hoping to create a record by berthing at Southampton in 14 days.

Food on board was something to write home about after nine years out East, and though there was a shortage of staff, everything was done for our comfort. The one snag to the "old soldier" was no chhota hazri and no afternoon tea. However, an early "understanding" with the cabin steward (and there were a few) regarding chhota hazri and a daily visit with a large flask to the troops' canteen soon solved this problem. That canteen, by the way, was open almost the whole day, and there was always a queue filing past it.

What did get on one's nerves was the loudspeaker, which towards the end of the day must have got red hot through incessant use. These loudspeakers are installed throughout the ship—down corridors, on decks, in dining rooms and saloons—and there is no getting away from them. Announcements ranged from snap orders issued by some worried Orderly Room Sergeant to the more honeyed tones of the Ship's Adjutant, and it was not long before differences in "tone" were noticed, e.g., "No. 123456 Private Jones will report to the Ship's Orderly Room at once". "The Ship's Purser has a message for Brigadier so and so. Would he very kindly call at the Purser's Office at his earliest convenience?" "B' Mess Deck sweepers have not yet reported. They will do so now at the double". And so on.

Our voyage was uneventful. It was very difficult to find anywhere to sit, and anyone going home is well advised to take a light folding chair or a fat portable pillow. At 10 a.m. daily there was a "stand to" for all passengers at Boat Stations. It lasted for two solid hours. At first we thought that a daily dose of this was stretching the red tape a bit too far, but its secondary purpose was to get the inside of the ship and lower decks cleared, so that those responsible for cleaning could get on with their jobs. But the days passed without incident; Perim was left behind about noon of the fourth day, Suez reached in the early hours of the seventh, and Port Said late the same night. No passengers were

allowed to land. We were told we would leave at 6 p.m. and we did, bang on time, rather to the consternation of certain lethargic stevedors, who had to be bundled off while the ship was in motion.

Seldom have I seen the Mediterranean looking so blue and calm, and for the next 48 hours only flying fish and porpoise, with a very occasional ship, were to be seen. Our next glimpse of land was Cape Bon. We kept moderately close to the North African coast, making straight for Gibraltar, which we were due to pass well in the middle of the night.

Next morning found us travelling northwards, skirting the coastlines of Spain and Portugal, and so into the "Bay", which was as calm as a mill pond. We were well within grasp of the record, but wireless news told us that the "Queen Mary" had just berthed in Southampton, and that same night we learnt that our destination had been changed to Glasgow. Bang went any hope of creating a record. Lands End was passed at 6 a.m. the following morning, and we got our first glimpse of England on the 14th day. It was a day of perfect sunshine, the sea was calm and green, and snatches of Welsh coastline were to be seen. We were in British waters, the weather forecast was an anti-cyclone over the British Isles, and everything in the garden looked lovely!

We awoke next morning to find ourselves within what looked like a stone's throw of Gourock, and after lunch began to move majestically down the Clyde, with sirens hooting and troops exchanging pleasant ribaldries with all and sundry along the banks of the narrow river. A perfect summer day, with not a cloud in the sky. What a thrilling moment it was! And so we reached Glasgow on our 15th day on board.

We tied up at 4-30 p.m. Unloading started at once. Never were the loudspeakers so busy. All sorts of officials had come on board at Gourock, and people were being continually summoned to do what they should have done or to undo what they had incorrectly done. Special trains, train timings, warrants, telegrams, food ration cards, clothing coupons—all were ready for our arrival. It worked like clockwork.

Special trains started leaving early next morning. We, destined for London, were not due to leave until 4-30 p.m. so there was plenty of time to sort out baggage and get through the Customs. Finding one's luggage was not easy, for it had been emptied out from the holds willy-nily—and not too carefully either. There were not more than a dozen porters. I learned two lessons: (i) that crates for tin trunks are useless; the majority (including four of my own) were smashed almost beyond repair; the best method seemed to me to have boxes corded or wired, then sown up in gunny, and then corded or wired again; (ii) in addition to having name and address painted, have some identification mark of your own—a coloured cross, circle, triangle—which you can spot immediately from a distance.

I was surprised at the leniency of the Customs officials. After making a comprehensive list of all I considered I should not have had the Examiner merely said "Is that all?" and casting a kindly, but nevertheless rather supercilious eye over our mass of very moth-eaten looking luggage, proceeded to put his *dhobi* mark in coloured chalk on them. Search for two hours failed to reveal a smallish box which we valued. I informed the M.F.O.; he told me not to worry—and sure enough all our heavy baggage, including the lost box, arrived safely at our house within ten days.

Fortified with flask of coffee, biscuits and sandwiches we boarded the train. We found our appointed carriage, complete with a copy of that day's paper on every seat, and with NAAFI girls waiting with cups of tea, cakes, short-bread and slabs of chocolate. An extraordinary kind thought on the part of someone. I cannot adequately describe the rail journey southwards; everyone's nose was glued to windows, eyes absorbed the rosy cheeks of children, the green woods, clear fresh streams, and the recently cut and stacked crops.

Our arrival at King's Cross at 7 a.m the following morning was not quite so rosy. Not a porter was to be seen. Everyone soon got down to it, brake vans were soon unloaded, trollies and hand carts appropriated, and within half an hour all the kit was in the Station entrance. There were no taxis—but we found we had not been entirely overlooked, because just round the corner was a fleet of lorries, ready to take passengers to other destinations or stations in London.

Had I been lucky? Yes. But all the work, the administrative planning, the forethought for one's comfort, in fact all those things which are so casually "taken for granted" were not just luck. From the moment or our arrival at Deolali to our arrival at King's Cross someone else had been working, scheming, planning for our comfort. Thanks are due not only to the players on the stage, but also to the unobserved actors behind the scenes.

One word of warning: do make arrangements about accommodation. The India Office issues a memorandum containing very useful information; it is a pity it is not available for issue before leaving India, for it gives advice on a wide range of essential subjects. One of them concerns accommodation, for it lists three hotels—the Montague Hotel, Montague Street; the Majestic Hotel, 160 Cromwell Road, S.W. 7; and Park House, Clarnicarde Gardens, Notting Hill Gate. Each of these is for officers and families, and at the end of my leave I stayed at the Majestic Hotel with my wife, and we were very comfortable.

I will not attempt to give my impressions of Home. All I will say is that I had a thundering good leave, enjoyed every moment of it, and am already looking forward to repeating it.

THE ROYAL CENTRAL ASIAN SOCIETY

Members of the U. S. I. shortly going Home may be interested in the announcement, published elsewhere in this issue, concerning the Royal Central Asian Society. Founded in 1901, it provided a centre in England through which members whose work lies in Western Asia can maintain useful contacts with each other, while it also assists in promoting and maintaining friendship between nations in Western Asia and Great Britain. The Society conducts lectures and meetings in London, and also issues a valuable quarterly Journal containing articles, reports of lectures and reviews of books on a wide variety of subjects connected with Central and Western Asia. The present President, the Rt. Hon. Lord Hailey, who has many friends in India, assumed that office in 1941. Readers who would like to have further particulars of membership, etc., should write to the secretary at the address given in the announcement.

FRONTIER REALITIES.

BY BRIGADIER M. R. ROBERTS, D.S.O.

I am not a Piffer, I am not out to defend the galling restrictions so often imposed on troops on the N. W. F. to which Lieut.-Colonel Spaight referred in his article entitled "Frontier Myth," and I am not out to defend the "die-hard" school of frontiersmen who used to be attacked by "Auspex" under, I think, the same heading. I agree to a greater or lesser degree with quite a lot of what Lieut.-Colonel Spaight says, but I do not agree with his conclusion, and in this article I propose to show that we have in the past, and can still, learn most valuable lessons from our little wars and daily round and common task on the N. W. F.

It is almost a tragedy that we spurned much of the skill in minor tactics that had been learnt by years of bitter experience. There are many who would be alive to-day had they had a few brushes with "The best Umpire in the World." I can tell a story of a patrol that avoided a skilfully laid Japanese ambush in surroundings of paddy and thick jungle, because of the suspicious mind of a Havildar doubly steeped in frontier training. He was a Pathan as well as a member of a battalion that had just spent five years on the N. W. Border. The patrol subsequently attacked and routed the ambushers.

In my time I have fought Germans, Turks, Persians, Pathans and Japanese, and I have no hesitation in saying that the most skilful minor tactician of them all is the Pathan. Lieut.-Colonel Spaight quite rightly pours scorn on catch phrases, and I am going to add another one to those he quotes; one that was very popular, and which I am glad to be able to say I would not allow in my battalion. Here it is "Forget what you did on the Frontier; we are now training for Modern War." The need for a very high standard of individual skill in the junior leader and soldier, which was always insisted on on the N. W. F., has never been more strongly emphasised than it was in the late war, and success has often been entirely dependant on the P. B. I. and his too-often neglected, staunch ally, the P. B. M. (let M equal mule).

It is a platitude to say that War will be revolutionized by each new weapon of destruction. Gas, air power, self-propelled armoured vehicles have each brought about their revolutions in modern times, but each tends to cancel out either because of the fear of reprisal, or because effective counter-measures are invented. One cannot hope to win a major war without modern weapons and skill in their use, but the ultimate object of them all is to put one's foot soldiers into the enemy's country, with an intermediate object of putting them into battle with an odds-on chance of success by destroying the enemy's scientific and mechanical engines of war. Apart from this, the only method of winning a war is total obliteration of the enemy nation by scientific methods.

The harnessing of atomic energy has brought such a method into the realms of possibility, but as in the case of gas, fear of reprisal is the greatest safeguard against an attempt by any nation to resort to it. It is likely, therefore, to remain in the background as a threat, or as a last desperate measure to turn defeat into victory. It is therefore safe to say that in any war of the future we shall still want our skilled infantry soldier. If this is accepted,

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we must accept the contention that any form of operations against a skilled minor tactician, with one's life as the stake, is first-class training. That there is more to it than this is what I am now going to try and prove. My arguments are not going to be academic, but based on personal experience and proved historical fact.

I start with every sympathy for Lieut.-Colonel Spaight, having suffered from the same "repressions." I merely suggest that he hasn't made the best of his opportunities, and has come to a wrong conclusion, which indirectly, and I am sure unintentionally, casts a slur on a large number of very fine soldiers who acquitted themselves magnificently in the late war.

We must be very careful that the term "Modern War" does not become a catch phrase. Many years ago, when I was officiating Commandant of my battalion in the absence of the C. O. on leave in England, I asked for permission to utilize the winter collective training period in the study and practice of forest fighting. There were several hundred square miles of forest and jungle in the vicinity and very little open ground. The answer was that the collective training period would be devoted to Extensive Warfare. I give this as an example of not making the best of our opportunities.

The N. W. F. provides endless scope for the study of War, and if we write it off as useless for training we shall be making a grave error. Let us study and practise war in conjunction with jungle lore, mountain lore, desert lore, and watermanship. Each of these lores have many points in common, and anyone trained in one of them can rapidly learn the characteristics peculiar to the others as they are basically merely a study of nature.

As an example of this I quote the 5th Indian Division, who went from one extreme to the other—Middle East to Arakan—with a very short interval for "tuning up." In the Arakan they came up against Japanese troops whose morale was sky high, who had more than two years' experience in jungle fighting and knew every inch of the ground, and yet that short tuning up was quite sufficient to enable them to hold their own at the start and very rapidly to gain the upper hand. We in the 7th Division next door know how good they were, and by June 1944, by which time both Divisions were again co-operating in Assam, they had more or less formed a mutual admiration society. This, plus the fact that in the move north the two Divisions had done a mutual swop of a Brigade, must have caused the Japanese Intelligence and Command many severe headaches. I apologise for the digression and will return to the subject, and I propose to deal with it by taking each of the "Frontier Myth" headings in turn.

Operations of War.—I am not quite clear as to what is meant by "frontier procedure," but I am assuming that "battle procedure" is meant. One does not need to think back very far to remember the time when battle procedure became a headline military topic, and yet I can remember having it rubbed into me 25 years ago as an essential in mountain warfare. That battle procedure of 25 years ago was very little different from modern practice.

The contention that the guarding of a mule train breeds caution, hardly bears examination, as it is merely an application of the principle of a secure L. of C., whether it be across the Atlantic or to a post on the Frontier or to forward units in a battle area, or to air bases from which airborne supplies are sent forward. In all cases security must be one hundred per cent. Moreover, the N. W. F. is not the only place where animal transport has to be used and protected. Efficient air supply is dependent on air superiority over the battle-

field, and one will not always be able to sit back and do nothing while the air battle is being fought out.

The Advanced Guard, it is said, makes no advance without security, but surely that is what its task is! Until troops deploy for battle there must be a protective screen, and in country where visibility is free for all, and almost every feature provides a strong tactical position, the protective screen must be large until the commander has established his secure base and deploys his troops for battle. The N. W. F. is an ideal place for teaching the principles of protection, because not only can one see errors, but they are usually brought home to one very quickly with unpleasant consequences, and the lesson driven home.

Fortunately, unless one continues to perpetrate the same error, the tribesman is not as a rule in sufficient force to cause anything more than a temporary unpleasantness. Surprise, darkness, fog, thick jungle, enable one to cut down protective troops to a minimum, or even dispense with them altogether temporarily in order to achieve speed. The use of darkness to bypass and cut off the enemy is not at all unusual, and the 1937 operations give some excellent examples of it.

The use of tanks as mobile pillboxes saved hundreds of lives in the Arakan and in the advance into Burma, and the Infantry have good cause to be grateful to the courage and determination with which tank units carried out this difficult and trying role. It did not affect their dash and skill when they were "let go" when more open country was reached. In the case of tanks it is perhaps a pity that the technique of their use as mobile pillboxes was not more highly developed in peace-time, and the one place it could have been done under service conditions was on the N. W. F.

As to there being no scope for bold and original action, there is always scope for it in carrying out a task, but while encouraging it one must impress the fact that boldness and originality is a menace unless it is directed on the accomplishment of the task allotted, and must be the result of a prepared mind taking advantage of an opportunity, the possibility of which has been foreseen, or the result of a carefully prepared plan, with everybody briefed in his role. There is a great deal of loose thinking about boldness and originality, and a failure to realise the extremely narrow dividing line between boldness and foolhardiness. Hard thinking is the basic requirement of successful boldness and originality, and not as many think, inspiration.

The Attack.—The attack envisaged in "Frontier Myth" is obviously the deliberate attack, and it is of course true that the tribesman will not usually wait to be overwhelmed by artillery and superior numbers. To carry out an attack of this nature one does not need highly skilled infantry, and it is child's play to the Infantryman trained in the art of infiltration, envelopment, and the immediate counter attack.

The tribesman will stand if he thinks he is "on a good wicket" and the Nahakki operation is a recent example. The 1937 operations give a good example of the enveloping attack, using darkness to get the troops into position. Such operations can only be undertaken by skilled troops well-led and well-versed in mountain lore, and such skill is invaluable in any theatre of war.

Defence.—The question of defence on the N. W. F. in the event of encountering an enemy possessing artillery and aircraft is one which was receiving much thought, and not a little practice, just before the present war. The very

fact that the tribesman does not attack large perimeter camps is sufficient justification for their existence. They are economical in man-power, and solve the problems of water and distribution of supplies. As long as they fulfil the requirements of the principles of security, concentration, and economy of force, they are sound tactics. In ordinary times the care taken over obstacles and the co-ordination of defensive fire was very great, with priority to the camp pickets, which are nothing more or less than F. D. Ls.

The procedure for establishing a N. W. F. perimeter camp is very little different from that of forming the jungle harbour or the desert lager. The former was more close hauled, and the latter more dispersed, and of course had to disperse completely at daybreak, a simple matter where everyone is mechanised, or motorised.

Frontier service particularly stresses the fact that there is only one degree of defence—viz., the last man and last round. I use the word defence in its proper meaning, which does not include delaying actions.

Rear Guard.—Over this question the author of "Frontier Myth" has really gone astray. The Commander who has to order his Rear Guard to hold doggedly on to positions is either suffering from surprise, or is faced with defeat, and can only avoid it by sacrificing part of his force. The whole art of Rear Guard action is to avoid getting into a dog fight, and a Rear Guard dog fight is as often as not the starter's pistol for a running fight which will rapidly degenerate into a disorderly retreat, unless the commander is in a position to launch a counter attack in force.

The portion of the Rear Guard which "runs like hell" is the Rear Party, (each picket in its turn forms part of the Rear Party) and the object is to get away without the enemy knowing it, and this object is not peculiar to the N. W. F. Nowhere is the lesson of the stealthy slip away, followed by movement at maximum speed as soon as one is out of sight and hearing of the enemy, more thoroughly rubbed in.

It has also perhaps been forgotten that the signal to retire is NOT an order—it is permission. If a Rear Party cannot disengage it must hold on, and it must if possible get news to the Commander that it cannot disengage without help, before the signal is given, thus giving the Commander an excellent opportunity to lay an ambush for the would-be pursuers.

I contend that there is no finer training ground in the minor tactics of withdrawal than the N. W. F. The greatest aids to delaying action, darkness, jungle, broad rivers and fog are not normally available, and one must rely on the skill of the soldier in the use of ground, speed, and the skill of the Commander in misleading the enemy into over-confidence, and then dealing him a crushing blow by a well-planned ambush or counter attack.

A last word on "looking over the shoulder." A picket that is looking over its shoulder all the time is not doing its job, and any Company Commander that allows his men to get into that frame of mind is not fit for his appointment. A picket has a very full-time task. Having attacked and gained its objective it has to put it in a state of defence. It must then recee the surrounding ground, carry out continuous all-round observation and report all suspicious movement. (For training purposes in peaceful times I used to make pickets report all movement). It must plan and be ready to give support by fire to other pickets, and finally recee and prepare its plan of withdrawal. The wise company and Battalion Commander will whenever opportunity offers (and in peace times such

opportunities are plentiful) visit pickets and see that they are doing their job and not just sitting about "looking over their shoulders" waiting for a sign.

Patrolling.—Anyone who has read as far as this will, I hope, agree with me that what I have said just above proves that a picket is in fact the simplest form of fighting patrol. In addition it has, on reaching its objective, a recce role, and this was a very common form of fighting patrol used in the Burma campaign. A company or platoon would move out and establish a well-hidden secure base in or near the area allotted to it for operations. Such patrols either had a recce role, in which case they were enjoined to avoid fighting if possible, avoid villages, and were given definite tasks within a well-defined boundary, or a protective role to stop infiltration and delay attack through the area allotted them.

The restrictions on peacetime patrols on the N. W. F. are galling, and are often carried to extremes when the situation is "not so peaceful," but even this has some training value, as all patrols have restrictions placed on them, and must learn to respect them. The main point is, that even the humdrum duties of route protection provide training in self-reliance and independent action by junior leaders, get small detachments into the habit of looking after their own flanks and rear, and making certain that they have all they need in the way of ammunition, food, and water for the time they are going to be out. Officers and men with these attributes will take very little time to accommodate themselves to the particular conditions of any theatre of war they may be sent to.

Night Operations.—Peace conditions on the N. W. F. impose a very severe handicap on advanced training in night operations. It does not, however, place any restrictions on individual training, which in my opinion is a phase of training to which we do not give anything like enough attention in normal times.

In unit cadre courses how much time is given to night work? How much individual night training does Tommy Atkins, Jack Sepoy and Johnny Gurkha get? In Frontier Cantonments like Razmak, where advanced night training is restricted and distractions such as moonlight picnics, dances, and cinemas are non-existent (except perhaps for the occasional cinema show), it seems to me that there is a wonderful opportunity for making up for a serious deficiency.

Physical Fitness.—Long-route marches are only one of many means for keeping troops fit and tough. In any theatre of war there are long periods when forward troops get no long marches and very little opportunity for toughening up, and if one tried to keep up the intensive effort of the training division it would be very apt to make men stale, physically and mentally.

In any frontier standing camp or cantonment, nature provides, within the outer ring of camp pickets the most excellent obstacle courses, which, with little ingenuity, can be used as battle inoculation courses. The camp pickets are quite safe, provided of course they don't look over the wall in the wrong place, and plug their loopholes on the side from which the firing is coming.

Alertness.—Alertness can be taught and maintained anywhere. If a unit isn't alert it means that its officers aren't doing their job. If a soldier can be taught alertness in the Regimental Centre it is hardly logical to say he must lose it on the frontier because he isn't shot at often enough, and isn't allowed to shoot at a tribesman merely because he does not like his face.

In any case, alertness should not be taught purely as an adjunct to proficiency in battle, or as a kind of talisman to ward off bullets. The alertness of the mental sluggard that only functions when he is in danger of being hurt

is merely "cold feet," and he is the man who is going to panic when surprised. Alertness is the fundamental requirement in a good soldier, applies to everything the soldier does, and must be insisted on at all times and in all places; and this of course applies to officers even more forcibly than to other ranks.

It is, for example, very much easier to keep on one's toes on the N. W. F. than, shall we say, in the plains of Bengal and the U. P. Routine and an enervating climate are the greatest enemies of alertness, and on the frontier one does get an occasional gingering up even in the most peaceful times, while the climate to say the least, might be a lot worse.

Use of weapons.—The main grouse against the frontier appears to be that weapons have to be used at long range against a well concealed enemy, or that the range is so close that one can't use one's weapons. Wherever a few weapons training experts collect, two subjects will always come up—the training of the sniper and fire direction and control. It is almost black ingratitude to complain that the tribesman supplies one with the ideal targets to practise those two arts.

As regard the use of weapons when one gets mixed up in an ambush one might of course give Mr. Punch's advice to those about to get married, but that would hardly be constructive criticism. In a land where the study of ambushes is literally as old as the hills, one has a wonderful opportunity of learning how to lay them, how to avoid them, and how to act if you have the misfortune to walk into one. The study of ambushes as a training subject is one which is of absorbing interest. Even the most blase "old sweat" will forget to be bored, particularly when, as is so often the case, you can reconstruct on the actual site an ambush that has taken place.

Political Control.—Every soldier who has served on the Frontier for any length of time has chafed under the restrictions imposed, and there are many instances where restrictions have been carried to an absurd length. No one can deny, however, that our Frontier policy during this war has been remarkably successful. There is no need to comment on the terrible strain that would have been imposed on India Command, and its repercussions on S.E.A.C. had the N. W. F. flared up between 1942 and 1945. Even the stout heart of our Commander-in-Chief might have missed a beat if he had been confronted with such a situation.

Before framing my own conclusions, I will use a little more space in examining in detail the conclusions of "Frontier Myth."

The use of massed modern ground weapons and vehicles, is just as impossible in the swamps, jungles and mountains of the tropics, as it is on the N.W.F. Under such conditions the skill and confidence of the junior leader and soldier will always be of paramount importance, and these attributes are the very essence of success against the tough guerilla fighter. Allowing for the restrictions on the use of modern ground weapons, and on the freedom of action of infantry, it is still at most a half-truth to say that the frontier is not good training ground for modern war.

The next conclusion was that troops and officers steeped in frontier training are liable to be excessively cautious, timid in patrolling, ignorant of modern tactics, unfit physically and horrified of high casualties. In spite of this it produced the 4th and 5th Indian Divisions that bore the brunt of the infantry work of Field Marshal Wavell's brilliant campaigns in Africa. Outnumbered, and not as well equipped as their opponents, they were tools worthy of the master craftsman who used them. The divisions that came after them, trained and led

mainly by officers and V. C. Os. steeped in frontier training were equally good. It is invidious perhaps to mention particular regiments, but I am going to take the 5th Royal Gurkha Rifles Frontier Force as a concrete example. It would be difficult to find a Regiment more steeped in frontier training, or with a finer record in this war. I am in a position to vouch for the fact that their reputation was well-earned as I had a battalion of them in my Brigade, and no commander could wish for better troops, and yet none of the Regiment's V. C.s were earned by that particular battalion.

The third conclusion, that frontier trained troops need special training before they go to war I am going to agree with, but only because every unit and formation is the better for a period of special training for the task in hand. It is a sad, but true, fact that veterans of 1914—18 were at the outset no match for the Wazir and Mahsud in the 1919-20 campaign. They had plenty of what our American allies sometimes call intestinal fortitude, but they were used to the then modern conception of war-fighting encadre behind barrages—and the tribesman "made rings round them." Fortunately the G. O. C., that very fine soldier Sir Andrew Skeen (the author of "Passing It On," which I commend to anyone who is about to serve on the N. W. F.) diagnosed the trouble and called a temporary halt until people had done a little special training.

What is the conclusion? Surely it is that if we take full advantage of the opportunities for the study of war, which service on the N. W. F. offers, we can if we think, and think and keep on thinking, learn the most valuable lessons, and I am sure that "Auspex," the most severe critic of frontier methods of recent times, will agree with me. Had we absorbed and really made use of the lessons in minor tactics offered to us by experience on the N. W. F., we should have escaped making many of the avoidable mistakes that we made early in this war.

To the higher commander the frontier offers little scope for the study of strategy, as strategy means nothing to the tribesman, but it does give practice in the handling of troops under active service conditions. To anybody who has not experienced it, it is difficult to describe the feelings of a formation commander when he commits his troops to action against a real enemy for the first time, knowing that if his appreciation and plan is faulty it is not only going to jeopardize the success of the general plan but is also going to waste valuable lives; or the confidence that he gains if the operation is successful; and confidence is the basis of successful leadership. In the highest levels N. W. F. strategy is subservient to policy, but this is a restriction from which even Dictators suffer.

Japanese Emperor's Treasures.

"The Japanese Emperor's treasures constitute one of the finest Oriental art collections ever assembled. It must be worth many millions of pounds. Few Europeans have been allowed access to it. If it is to be disposed of (it is reported that he intends to sell it in order to relieve the food situation in Japan), it is very much to be hoped that it will enter some great American museum like the Boston Museum of Fine Art, where Japanese art has been studied for more than half a century."—Mr. Francis Whaley, for many years a teacher of English literature in Japan.

MONSOON PATROLS

By ".I"

PATROL at sea during the war could be, and very often was, a very dull and monotonous affair, but however monotonous, one could never for one moment afford to relax. An enemy aircraft diving through the clouds, a torpedo heading towards the ship, or perhaps an E-boat or Japanese suicide craft suddenly appearing through a patch of bad visibility; any of these were liable to disturb the serenity of one's patrol. At one moment everything would be nice and peaceful and the next, either you had been caught bending or you were having the time of your life. If you did happen to be caught bending it was just too bad and the chances were you were "never caught no more."

It was not only the enemy that was liable to cause one to be alert. I have, and always will have, vivid recollections of one occasion in the early days of the war, when I was called up on the bridge to find myself apparently in the middle of a large convoy proceeding at right angles to my own course. It was a darkish night and on all sides large shapes would suddenly loom up and then gradually fade away. I was extremely thankful when the last of them had faded. I felt I should have been at a considerable disadvantage had one hit me, the majority of the ships in that particular convoy being over ten thousand tons and my poor little ship being something under two thousand.

Patrol work was of course a very different affair to convoy work. In the former one was often completely on one's own, patrolling waters in which after a time one almost seemed to get to know every individual wave; one certainly got to acquire a very good knowledge of local winds and tides. In convoy work one always had company, and, although often monotonous the job was seldom dull. There always seemed to be something to do. Lagging ships to be hurried up, stragglers to be rounded up, ships pouring forth clouds of black smoke to be asked to make themselves a little less conspicuous, and so on. On patrol work any ship which appeared on the horizon was a potential raider or possible enemy merchant ship trying to break through to or from a neutral port.

In the early days of the war, shortly after Italy joined in on the side of Germany, I had a spell of patrol work off the entrance to the Persian Gulf. Hundreds of thousands must have flown over that area, especially during the last few months, but it needs a spell at sea to appreciate its trials, especially during the monsoon months. The monsoon itself did not penetrate as far north as our normal patrol area, and, as a result, the summer months were as hot as any I have experienced in any part of India. Many tales have been told of the hot weather in the Persian Gulf, but we seemed to keep remarkably fit in spite of it all.

In those days and in that part of the world suicide craft and E-boats were things we did not have to worry about; aircraft were such an extremely remote possibility that they did not worry us much either. There was always the possibility of a submarine, but our main interest was of course surface craft and the possibility of an enemy raider or a blockade runner appearing.

At one time there were enemy raiders operating in the Arabian Sea, and it always seemed to me that they might have a go at the large amount of tanker

traffic passing through the Persian Gulf. Many of the ships passing through our patrol area came to be regarded as old friends and regular customers, others identified themselves without any trouble and soon passed on their way, but there was a third category who didn't trust us any more than we trusted them. These latter were a nuisance at times, as often after we had become quite satisfied as to their respectability they continued to view us with grave mistrust. They were usually neutral ships which we were interested in from the contraband control angle and they were, at times, extremely difficult to approach.

Once they were themselves convinced of our own respectability, they were all, without exception, all out to help us in every respect. One neutral ship did complain later that he thought I'd led his ship into extremely dangerous waters, but the Master was an extremely old gentleman suffering badly from nerves and I suspect he retired shortly afterwards. Incidentally, he had a comparatively young and, according to my 1st Lieutenant, not unattractive wife travelling with him. Enough to make anyone nervous!

I often wondered what would happen if I did meet a raider, for my ship would normally have been outgunned by about four to one. I had, in my own mind, devised many schemes for counteracting this rather heavy disadvantage; probably luckily for the ship, however, we never had to try them out.

There were compensations to these patrols in the Persian Gulf. On the rare occasions when we had a day off from patrol I used to take the motor boat away with a volunteer crew and do some fishing. I had discovered to my great delight, while rummaging in one of the ships' store-rooms, that one of my predecessors had left two perfectly good rods behind him. On my next visit to civilisation I succeeded in getting hold of reels, lines, traces, spoons, hooks, and all the rest of the fishing paraphernalia, and we managed to get some really excellent sport. I am, I'm afraid, no expert fisherman and know little about the technicalities of the sport, but apparently the fish were either equally amateur or extremely hungry, as after a couple of hours trolling, we usually managed to return to the ship with over a hundred lbs. of fish on board which was divided between the ship's company and the officers. My best fish was a kukauri weighing 56 lbs. The average weight was between twelve and twenty-five lbs., and some of these smaller fish fought extremely well. Of the ones that got away I will not speak, except to say that a good many succeeded in doing so, and on one occasion at least I landed the head of my fish only, the remainder having been taken by a shark or some other hungry fish.

Then there was the time when we went off to a small port to boiler clean and to have a week's real rest. It was pleasant to be able to go to sleep after dinner and to know that unless something very untoward happened one wouldn't be called until six o'clock the next morning. It was pleasant to be able to get ashore to stretch one's legs to play golf (of a sort) and tennis, to swim and even go riding. It was equally pleasant to be able to get a change of diet; our food at sea was, like our patrols, usually dull and very monotonous. It will be a very long time before one forgets those occasional weeks of rest and the very splendid hospitality of our hosts ashore.

There was another time when I spent a cold weather stationed at the mouth of the Shat al-Arab. I had my gun, and cartridges were still available, and the supply of duck seemed to be inexhaustible. That, however, was nothing to do with the Monsoon Patrols and is another story altogether.

Fairly early in 1942 I left the Persian Gulf, curiously enough not without a certain amount of regret, and flew down to join a ship operating off the Arakan

and Burma coasts. Here conditions were very different. Rangoon had fallen and the Japs were steadily advancing towards the borders of India. It was not long before I had my first experience of Japanese bombing. I was taking passage from Calcutta in a merchant ship, and we had not proceeded very far before we were attacked by a large four-engined bomber. Apart from a couple of splinter holes from a near-miss no damage was done and our Lewis gunner triumphantly claimed to have hit the Jap; as the latter was flying at well over five thousand feet I was reminded of a claim I once made to have hit a very high and fast flying pigeon with a rather feeble Daisy Air Gun. My father's reply was a classical one, but I did not consider it tactful to repeat it on this occasion.

In those days we found that Japanese aircraft were definitely public enemy No. 1. Bombers used to fly serenely overhead well out of range of our AA armament, and fighters had a habit of suddenly appearing from low over the land; the latter, however, soon learned to respect our close range armament, and apart from keeping us continually on our toes, did not worry us very much. Patrols were neither dull nor monotonous in those days, as, in addition to aircraft, there always seemed to be a sporting chance that a Japanese cruiser might appear around the corner. Before the monsoon had really broken, however, Japanese bombers put paid to our account, and for the next two years I had to be content with Staff jobs ashore. As it happened, during those years there was very little patrol work and practically every ship the R. I. N. possessed was fully employed on convoy escort work, not only in the Indian Ocean but also in the Mediterranean and the Atlantic.

The last monsoon found us once again on patrol off the Burma coast and the Andaman Islands. Conditions were very different from those of three years before. Rangoon, once again in our hands, was our forward base and, although battered in places, was already the scene of considerable activity. Shops were beginning to spring up, sampans, and the varied and in the majority of cases extremely rickety motor boats which always appeared to be a feature of Rangoon river, still seemed to flourish. Sampans I noticed had not given up their habit of playing last across the ships' bows; dodging Sampans in the Rangoon river in a four-knot tide is not a sport I recommend to the faint hearted. Our patrol area this time covered a wide district, off the East coast of the Andaman Islands and then across the Andaman Sea to the Tenasserim coast and further south among the hundreds of islands of the Mergui Archipelago.

To me it was all very familiar water. Nineteen years before I had spent six weeks in hospital on Ross Island at Port Blair suffering from a fairly mild go of para-typhoid. I had shot snipe over on Aberdeen and had been to many a picnic at Corbyns Cove. Port Blair had been a cheerful spot in those days, and in spite of my para-typhoid the Andamans will always hold pleasant memories for me.

In the early days of seafaring these islands had an extremely bad reputation among mariners. They were known as the "Isles of Ill Repute" and were reported to be inhabited by ogres and people who had "heads like dogs." Certainly they were no place to be wrecked on in those days, and even the present "Bay of Bengal Pilot" warns one that the inhabitants of certain islands may prove hostile to shipwrecked mariners. I felt, though for somewhat different reasons, that they were no place to be wrecked on during our patrols.

These patrols were an interesting sidelight on the complete eclipse of Japanese sea power. The Japs had excellent bases with aerodromes in the Andamans, the Nicobars, and Sumatra; they also had complete control of the

Tenasserim coast. The Andaman Sea should have been a Japanese controlled sea, but they had not got the ships, and the result was their outlying bases had been completely cut off from all their sea communications. Our patrols were carried out mainly in the hope of catching parties of men or supplies trying to run the gauntlet, either by moving from island to island, or by making a dash or from the Malacca Straits.

Our chief menace during those patrols was minefields, which seemed to crop up all over the place. Floating mines also occasionally appeared, and these were always welcomed as an opportunity to do a little firing practice. War or no war, the amount of practice ammunition one could expend yearly was strictly limited; floating mines, however, were definitely part of the enemy and ammunition expended on them was legitimate. Apart from mines there was always a possibility of an attack from Japanese aircraft and small torpedo or suicide boats. However, we saw little of the former and nothing of the latter, although at night we used to get as close as we could to the enemy's shore in the hope of catching something trying to sneak down the coast.

I think the most popular cruising area with all of us at this period was among the Islands of the Mergui Archipelago. Here we were partially sheltered from the monsoon, which actually never caused us much trouble; although it rained a good bit and there was a lot of cloud, wind and sea were usually quite moderate. In the Mergui Archipelago, however, we used to get occasional heavy squalls with long intervals of bright sunlight. Again I was in very familiar surroundings, as I had spent many years before the war surveying in those parts. Many of the islands are extremely attractive, with lovely sandy beaches and a surprising amount of animal and bird life. The sea fishing is first-class and so is the bathing, provided one keeps a good look-out for sharks.

In pre-war days the only inhabitants of these islands, apart from Chinese traders and Japanese poachers, were the Solonis, or Mawken. These were a nomadic tribe of sea gypsies who had apparently originally been driven out of the Tenasserim mainland, and had then settled down on some of the larger islands of the Archipelago. In these new settlements they were continually raided by Malay pirates, until finally they were forced to move from island to island always ready to run should an unknown boat appear in sight. As the result of this continual harrying they have always been a very timid though quite friendly and perfectly harmless tribe. We saw very few of these during our patrols and I am afraid the war has probably made them more timid than ever.

Apart from an occasional Mawken we saw no humans at all on these patrols. To vary our routine we used to sometimes send a landing party ashore on some of the small islands. Fully armed and covered by the guns of the ship, we were in theory exercising our landing platoon; in practice however, my 1st Lieutenant never failed to use this opportunity to collect some sand in order to keep our wooden decks, a thing we were lucky enough to possess, clean. Whenever my 1st Lieutenant suggested we should exercise our landing platoon I knew we were running short of sand. It was excellent training for the men.

How very different those last monsoon patrols were to the previous ones! In the dark days of nineteen forty and forty-two I don't think any of us had any doubt that we should come out on top eventually, but one knew that in all probability we would still have to go back before we could start going forward. In these patrols we knew we had turned the corner and were coming up the last lap fast. At the various islands I visited I used to think: "Well, we shall soon be back here." The men were the same, they were right at the top of

their form and were ready to go anywhere. The years had brought me increased seniority, and often among the R. N. and Allied ships with whom we were working we would find ourselves senior ship. This again was a good thing as it taught the men that we were all doing the same job on an equal footing, and if we happened to be senior ship, other ships, R. N. or R. I. N., carried out our orders. There was always the very closest co-operation and comradeship between R. N. ships and ourselves.

There were other things. I remember listening on the wireless to Howard Marshall commentating on the England-Australia match at Sheffield, and as I listened my thoughts went automatically to village cricket at home. Not however, as they would have done a couple of years ago, to memories of the past, but to plans of the future. It was the same with everyone, we were all looking ahead towards victory and peace. We did not have to wait long, We were in Colombo when Japan finally packed up. My main recollection of V. J. night was of trying to prevent other ships rockets and fireworks in general from catching my own ship on fire. A few days later I was once again appointed to a Staff job ashore.

The days of war patrols are for the moment over. Ships can once again sail with all their lights showing, and what a relief that is. Lighthouses are lit again, weather reports and storm warnings are broadcast to all ships. There is much still to be done in the way of sweeping up mines, repairing harbours and dredging neglected channels, but in the meantime the good old British Tramp is sailing again on his own with his rusty side and the old familier house colours.

"Let's forget the something war!" many of us are inclined to say; but when I look back on the days I spent at sea I feel also we have much we cannot afford to forget. The comradeship that existed between officers and men, European, Indian, regular officers and volunteers; all classes, religions and castes; a comradeship which existed as a result of a common aim and a mutual understanding of each others difficulties and problems we must never forget.

To-day our thoughts tend to turn towards different matters, to our own personal problems; many are leaving the Service and are going back to their own civilian jobs or to look for new ones, quite naturally tending to think of self rather than service. Some of us more ancient ones, who have spent all our time in the Service, are looking towards that cottage in the country, and are busy working out problems of pension and income tax. Others who are more politically minded are thinking in terms of future governments. Yet all of us, in our different and often selfish ways, are probably striving for the same thing, peace and security. Let us not forget the comradeship that helped in winning the war. Let us try and really understand each others problems, and we shall then go a long way towards winning the peace.

FOR LATIN SCHOLARS

"Mouse" writes:

In the Chetwode Hall (incidentally, the only institution in India associated with Field Marshal Sir Philip Chetwode's name) of the Indian Military Academy, there is a carved replica of the Field-Marshall's coat-of-arms. The motto beneath it runs: Corona mea Christus.

In the early days a cadet, whose Latin was weak, translated the sentence thus: "For Heaven's sake give me a cigar."

NUCLEAR ENERGY AND WAR*

BY MAJOR-GENE RAL F. S. TUKER, C.B., D.S.O., O.B.E.

A TOMIC power has been applied to war. It was not unexpected that it should come, but perhaps it came a little sooner than some anticipated. The bomb was certainly detonated before the world knew well what it meant and how far its effects would be felt now and in the future. It had to come, and it has come. It represents one of those inevitable trends of Humanity in our eagerness for that elusive thing called Progress.

In bursting, the bomb destroyed great areas of buildings and thousands of living creatures. It will not have destroyed the soil, except perhaps in insignificantly small areas nearest to the point of explosion. Although radioactivity will remain in the area for some days after the explosion, it now seems pretty certain that no chemical or radioactivity is left permanently in the soil or in the neighbourhood. Thus all we have, and perhaps that is enough is the complete devastation over a great area of the surface of the earth.

The bomb was the first and undoubtedly a very primitive affair compared with the better and bigger one of the future: it was also slowly and clumsily lifted in an aircraft, not necessarily the most efficient means of carriage to the scene of action. Before us, some years ahead perhaps, lies a period of warfare in which the atomic bomb is to be hurled far up into the stratosphere by very swift rockets, predicted or radio-controlled, and is to fall pretty accurately where it is needed a thousand or two miles away. Its effects will be scores of times greater than that of the ones of which Japan was the unlucky witness.

Thus in a short space of time a number of these rockets which we have as yet no good means of destroying in flight will create a desert over thousands of square miles of country. The greater the land-space of the country, the longer it will require or the more rockets it will require to devastate it. A little will be quickly dealt with.

In the ordinary course of events the production of all forms of nuclear power will cheapen. It has happened to every process so far, and it will happen now. Quite poor countries will be able to produce some sort of nuclear energy for their own use, for it appears, for instance, that we may one day be able to set up the same energy by using thorium instead of uranium. Thorium is found in the sands of Southern India and in many other parts of the world. It is a common heavy element, and so the process is cheapened, and cheaper still whenever we find some reasonable manner of producing its energy. The actual method of production should also become simpler, therefore the present-state of affairs, in which Russia, U.S.A. and the British Commonwealth alone have the productive power to build these terrible weapons, cannot last very long.

To-day the aeroplane, tomorrow the rocket, the invisible attack. The devastation of the surface of our Earth will be a simple thing. The fertility and the achievement of men's brains and hands which the ages have nurtured

^{*}The views I express here are based on such information as I have in October, 1945. For me they form a "yardstick" by which I may be able to assess the value and effect of each piece of later information that comes to me. Perhaps they will be of the same use to the reader.

in spite of man's open-eyed follies will disappear in the short space of one moon. At present it seems that we cannot utilise the atoms of some light and ubiquitous element that we could set off on an universal journey of destruction, and so send our own world up in smoke, a minor stellar spectacle for other planets to chalk

up on their tablets for future astronomical history.

In the past we have seen nations go to war in order to take parcels of useful land from another, to attach useful populations to themselves, to occupy a territory in the hope of making the indemnity, the reparations, pay for the expense of the war and yield a profit. Of late years we have seen how fruitless it is to expect the indemnity from a hard-fighting and finally crushed nation to pay any but the smallest part of the cost to the victor. We have seen the victor himself further impoverished by the loss of purchasing power of the conquered. That is a normal tendency now in the making of war. Thus it is in that respect working out to its logical conclusion. Germany and Japan are so weakened that their power of ever paying off any appreciable portion of what the other nations have expended on their account is negligible.

A war in which nuclear power is used for destruction will reduce the ability to pay to nothing at all. It will not only be the material loss but the wholesale destruction of the beings who work, both by death and by nervous exhaustion, that will cripple the ability to pay. Thus the victor will never in future get any return payment from a vanquished country. If he intends to occupy the land, then he occupies a desert, an area that will need all his own resources for years to come in order to make it anything of value to himself.

So there is nothing material to be gained by war. So why in the name of reason ever go to war? Why should there ever be a casus belli that makes war in these conditions worth while?

If we do not go to war, then will we use the threat of this destructive agency for super-power politics? I cannot think so, for it is sure that some time or other one nation will call the bluff on its neighbour and will call it mistakenly, and then there will be war. Surely we all see that this is the inevitable result of using that threat when most nations have a good knowledge of, and

the resources for, producing nuclear energy.

I suppose that Mankind is incorrigible. I do know that there are many nations that are not fit to enjoy liberty for the way that they will abuse it. Germany and Japan are two of them, and there are others. No nation that has not a national conscience is safe for the rest of Mankind, and only the democratic way of life develops a national conscience. For a nation to be able to run successfully a democratic government, it must be a temperate nation, not swayed hither and thither by its passions, a nation of reason that springs from a good ethical foundation. What nations in the world are like this? Few indeed.

So there will be irresponsible nations for decades yet and so there will be the threat of war, nuclear war for generations yet to come. It seems that some nations have a natural liking for war: they are in love and in league with death. It is no good our shutting our eyes to the study of the science of making nuclear war, for if we do shut our eyes we will not be able to prevent it, and we must take every course we can ever take in order to ward off this cataclysm.

If, as seems true, it is only the democratic way of life that is safe to the world, then those peoples who are not democratic are no more fitted to know of or to handle the weapons of war than is a lethally-minded small boy to handle a rook rifle. It is not safe for the rest of us to entrust them with deadly weapons, not safe to give them the very latest and best discoveries of nuclear energy if

these discoveries are to be bent to evil purpose. It seems lucky then that the nations that are nearest to the democratic way of life are the nations that are to-day most advanced in research into and in production of this new energy. It is also lucky that they need not part for a little time yet with all its secrets or all the latest discoveries unless they wish to do so, and then only to those people whom they regard as fit to enjoy the benefits of them without using the power thus acquired to force their will on weaker nations.

So the policy seems quite clear that these nations must put great efforts into the development of these energies, and must spend great sums in collecting to themselves for research all the best scientific brains in the world: that they must not part with any secret information or new device to any nation that is not fitted to receive it or prepared and to be trusted to safeguard it for the required time. If it is not possible for these nations to keep their newest secrets for a sufficient length of time, then the irresponsible nations will lay hold of them and there will be another war.

There are many who tell us that it is impossible to safeguard such secrets for an adequate length of time. There are others who say that only by giving to all nations at all times all we know of this development will we ensure that they do not work in secret to develop their own nuclear power for war. To the first the reply is that in that case the irresponsible nations will get hold of what they cannot beneficially use and there will be war. To the second, that to have released the secret to Germany or Japan, had it been known in 1938, would simply have handed to them the means to destroy us all, and they would have used those means just as they wished without ruth or shame. There are other Germanies and Japans to-day: the world has not yet seen the last of them.

Remember that although the scientist Bohr came from a highly-advanced small country, there are other small countries which are not so well advanced and which may yet possess physicists as good as Bohr: there are larger countries which may possess many Bohrs and yet be still irresponsible. We can never appease some people, no matter what we give them: they will demand more and if they do not get it, will go to war to grab it. They will demand more and more information about it, and more and more raw materials for this new world force, and in the end will fight in order to get them. Irresponsible peoples do not think much before they act. Their passions and their greed alone move them. Did the Germans ever wait to think that by making war they might well have it made on them in return, and so see their country transformed into a wilderness?

So we must sorrowfully face the possibility of nuclear war. I do not doubt that it will soon once more be the fashion to prefer all sorts of specious excuses for the Germans for making this last war, and that that will encourage some other nation to find similar excuses for making the next. We are very foolish in the way we offer our advice to such peoples as to how they could best plead their evil cause.

How, then, will war be fought?

Hereafter, I am not concerned with the moral aspects or the advisability of using this new energy for imposing one's will on an enemy. It must, however, be impressed that much as a British soldier may talk or write of war he loathes it more than anyone else, for he now knows it better than anyone else. He must study it, for it is he who must be first prepared for its horrors and to prevent its occurrence. Let us regard our fighting services as the preventers of war rather than the makers.

I emphasise that education is in peacetime the prime commodity of war. From it emerges the research, invention, imaginative and creative power of the nation's war organisations. The fighting forces must be founded on a broad basis of education of a much higher standard than that of to-day. It follows that our staffs and our commanders must be of a different quality from those whom we have been used to employ. I do not contend that these men must be civil scientists themselves, but that they must be true military scientists possessing active intellect, enquiring and seeking minds interested in all those sciences which are now so closely related to the business of the soldier. A military scientist is a soldier of imagination who has critically studied war through the ages, and in studying it has come to know its process and evolution and its full meaning. With that knowledge he must fit the results produced by the civil sciences on to his studies and so derive his opinions of war's future. Informed imagination is henceforth at a premium in our fighting services.

It is all the more necessary now that we should possess such men in quantity at the head of military affairs, for there is no time to be wasted, not one instant of time. Science has got us under control, and Providence alone knows for what we are heading.

As I see the problem at present there seems to be no chance of our ever being able to limit significantly the explosive effect of a nuclear bomb that detonates on the face of our country. With the high explosives of yesterday we could localise the explosion to some extent, though we must admit that with the arrival of the ten-ton bomb we were past the limit of what was practical in the way of artificial surface protection such as concrete. Already we had had to go deep down into the earth. But we did find that even with our heavy bombs quite a considerable amount of German surface industry was unscathed or repairable. With the atomic bomb none will escape.

There is no other apparent means than this great depth of earth by which we can avoid the effects of nuclear fission. If there is to be a release of nuclear energy, then it might be possible at some time or other to counter it by absorbing the effects of the release by some other form of nuclear "blanket." This seems impossible, since the effect of the explosion is of immense pressure and of intensest heat, and all we could expect is some means of minimising somewhat these two activities.

The problem appears to be little different from the problem of minimising the explosion of high explosive, but the size of the problem will be going up by almost astronomic proportions. We have to limit a pressure of some million atmospheres and a temperature of about a hundred million degrees. There can be no surface protection against this.

The only safe place tomorrow is below the surface of the earth. Since war will come suddenly, without a second's warning, by the arrival of the first great salvo of atomic rockets and since it will soon be followed by airborne bombardment and invasion if the main softening bombardment is seen to be successful, than it is certain that in all times of peace we must tread this earth quite ready for war, and live *inside* it quite ready for war. If we are to be quite ready then all necessary means of living and all necessaries for carrying on the war must be kept below the surface of the earth.

Thus, since nuclear bombardment will prevent the tilling of the soil on a considerable area after the crops have been obliterated and after every surface reserve of food available to the area is wiped out, great stores of food must be kept below the ground and means must be ready there to produce more food by purely chemical methods. The size of the food stocks to be kept must be

enough to last out the war, supplemented by whatever foodstuffs can be brought during the war into the area selected for attack and those it seems will be fairly limited.

They certainly will not come by surface ships, for ships will not live on the waters or make port against widespread nuclear attack by rocket and aircraft. Stocks of food may possibly come in by submarine, but even that is unlikely for submarines must at some time surface in order to discharge their load and some time they must make port. To avoid these handicaps we might be able to bring these craft by submarine channels into subterranean harbours by one means or another, but the great amount of work to cut the channels and to build such ports renders the project pretty hopeless.

Foodstuffs will have to be brought by air, the aircraft dashing straight into covered passages to their unloading quays. I do not doubt that in time we will find the means to rocket supplies from the producer country into the consumer country, and that there will be means of directing these rockets into the tunnels and collecting their contents.

All that has been said here applies equally to all sorts of commodities of war that are not produced in the consumer country in sufficient quantities to last for the duration of the war. In a country of small land-space, manufacture may not be able to continue in wartime, and it may be necessary in peace to store large quantities of missiles and of weapons. In "The Airmans' Geography" I have already stressed the inevitable tendency to produce everything synthetically where one may not be able to produce the genuine thing in one's own country. The nation will strive in peacetime to produce the whole range of raw material, either the genuine or the synthetic thing.

If in a country of small land-space we are to go underground for most occasions of peacetime, then it seems that only in order to enjoy ourselves will we pass our time on the surface of the Earth. In a country of great land-space we will be troglodytes in those areas within effective range of the hostile nuclear bombardment weapons. The urban life of to-day with its vulgarity and noise, its jangling nervous tension is unpleasing enough, but that of to-morrow in those horrible catacombs is far worse. If we could find there even the deathly peace of Proserpine's Garden in its uncoloured calm, it would be preferable to the hellion idiocy of those underground cities and their tunnelled thoroughfares.

Between these cities we must in wartime either go underground or shoot out by air.

The greater the land-space of a country the less chance is there of an enemy bombardment being able to close up the entrances and exits of the nests. However, in order to launch one's own nuclear bombardment there must be some sort of apertures for the underground batteries to launch their missiles. It might well be fatal if these were to be closed by the effects of enemy explosives dropping close to them. So land-space is also a necessity in nuclear warfare, for even existing, during the wars of the coming age of new energies. All the more essential is it that Great Britain should acquire land-space by throwing her borders right out into Europe. All the more is it necessary for the western Continental nations to be able to tuck their war potential well back into the United Kingdom and Ireland.

The smaller the land-space of a country, the less margin has it between securing its comparative safety and being obliterated. Since the effects of nuclear bombardment cannot as far as we now know be localised to any extent

on the surface of the earth and since, therefore, the small country's counter-bombardment weapons can thus soon be neutralised, it is life or death to it that it shall succeed at once in putting out of action its enemy's bombardment weapons. Its great hope is to be ahead in the research and production of these weapons before all the big nations, and so, by the threat of what it can do, to hold them at bay and to prevent their opening a war.

Therefore, a small country will always keep very powerful weapons of counter-bombardment. All this is really futile. There is only one security for a small country, and that is that it shall give up its sovereignty and join a cluster of other small countries and if possible other great countries, so that it may have the land-space in which to distribute and properly dispose its potentials of war. There can be no small nations.

Perhaps there may be another way of distributing oneself if one's coasts are washed by great oceans, and that way is to sink the nuclear bombardment weapons and the industries that support them and any other essential factories well beneath the surface of the sea. There are some advantages in being submarine rather than being sub-terranean. It is easier to submerge the submarine installation and to shift if about as needed, than it is to sink the subterranean equivalent, and impossible to move the latter about at will. We might then become to some extent a submarine folk rather than a lot of troglodytes. Perhaps from the sea we would continue our counter-bombardment of the enemy. Perhaps we will shift these weapons ever closer to his shores by moving them under the oceans towards him.

But I do not think there is any safety in the sea. It will be easy to set up by nuclear depth charge the pressure that will destroy the air vents and stove in the watertight cases of our submarine factories and batteries, and perhaps it will not be difficult for an enemy to locate them with modern means of detection.

The areas of the earth where are big open land-spaces lie in Russo-Siberia, China, India, America and the Middle East, Africa and Australia. So there are many large open spaces to absorb nuclear attack. Western Europe is ill-provided with open or empty land-spaces, so its hope lies in the brain power of its inhabitants, that they will keep Western Europe ahead of its possible enemies in the production of the nuclear energies of war. It is well within possibility that these Western nations may be able to find the raw material that will make them absolutely self-sufficient in the production of energy, independent of all oil and other fuel supplies which to-day make power.

The race is then on among the nations who intend to make war or who fear it, centering all their activities as the discovery and application of new forms of nuclear power or of some quite new power, a better, more violent, and more devilish weapon of death and devastation. Fortunately, it seems unlikely that cosmic rays, which may be matter completely converted into energy, can be harnessed to destroy mankind and his works, but it is possible that solar energy may yet be utilised for destructive purposes.

Starting from this point we can now get nearer to seeing the pattern of war as it will eventually be. Almost the whole nation is underground, with perhaps some portion of the population under the sea. I must find a word for this state of affairs in land and water: I will call it "underneath."

In these "underneaths" are great stores of food and raw material needed for producing war energy. Running up to the surface at various places at spots neatly ensconsed in hills or mountains or deep valleys, are the openings by which intercourse with the surface is provided and the bombardment apertures from which will be launched the atomic missiles. In these valleys and hills, Mother Earth will localise for us the effects of atomic bombardment.

(From here onwards I must avoid the adjective "atomic" since "all period, power and enterprise" will be atomic.)

Thus it will be the mountain countries that will be sought after, both for burrowing into the hills and for localising the effects of bombardment. The Welsh and the Scots will at last be top of the United Kingdom. The gallant Llewellin and Griffith can laugh from his Snowdon mountains. War power comes from the hills: thither we English will turn our eyes. The Himalayas may indeed come into their own, and Nepal may yet be a country to be courted by India instead of being treated as a poor relation.

Between the great areas of underneath industry and launching platforms there will be both underneath tunnels or ways of communication and overhead airways between place and place. Railways and roads will not be used, for they will be blasted to pieces. Surface cross-country movement will be too slow: the vehicles will for certain be destroyed. Only by swift air travel can intercourse be kept going: that is, in some cases by casting out the container rocket to its destination and in others by actual flight in aircraft.

The phenomenon of war that World War II has produced is that war now takes place from the interior of one country into the interior of another and not against the land borders. The war we are now thinking about is of that sort, and takes place from underneath in the mountains or underneath in the oceans. Let us confine our discussion to the mountains. It is only in the mountains that those things, those factories and those stocks, with which we will make war are safe. The greater the mountain areas the safer they are. I presume that nuclear energy will enable us to tunnel fairly easily these huge warrens.

I suppose that even with all aids there will still be an advantage in decreasing the range to one's target, and in getting more accuracy if one steps one's weapons forward as near as possible to one's enemy. Also, I suppose it will still be of benefit to be able from one's weapon positions to shoot deep into

the enemy positions and so disrupt his own groups of bombardment.

In "The Airmans' Geography"* I have discussed pretty fully the change in our ideas of geography coming mainly from the reduction of Stellar Space in terms of Time. To summarise the discussion. The area between somewhat east of the Yenisei River in Siberia and the Urals, when it is fully populated and agriculturally developed, obtains for itself as nearly as possible in these days the advantage of an insular position. It is an island in our modern sense. To the south is the island of India, stretching from south-east Burma to the mouth of the Persian Gulf. Then there is the insular power of Britain in Europe and, at some later date, of Africa south of the Abbysinia—Senegal line. In the Americas there are one and perhaps two insular powers and yet another in China, but of little strength.

I have summarised this in order to make clear the terms which I use in the following paragraphs. If there is to be war it may break out between any of these insular Powers. Let us see what course it would take. Recollect that we are here looking at a future some years ahead, not at things as they are

to-day.

In "The Airfarer's Geography" we showed that it is on the mountain barrier that a strong nation can stop definitely and probably for ever the land

^{*} October 1945 Number of this journal.

onslaught of a powerful aggressor. The mountain barrier now assumes greater importance, for it is within its crumpled features that we can get security against nuclear bombardment. Thus, we may expect that a country with a mountain frontier will hold these mountain barriers at the passes* which matter, and that close behind the garrisons will be distributed its forward nuclear bombardment groups. These groups will reach out deep into enemy territory.

Therefore, along with the local bombardment groups which hold off land attack, there will be two other groups: the first is the heavy bombardment group directed to reach the enemy's war potential, and particularly his areas of bombardment, and the second to reach high up and far out into the skies to break up an airborne attack. The actual local land defences will be sited to get the full value of local nuclear fire while defilading themselves from fire from in front and above. These local defences will therefore be tunnelled in deep. Within the defences will be the fortress supplies and munitions to last for many months for the garrisons.

A nation which has no mountain barrier as a frontier, but has an adequate ocean frontier, will seek in the first place to defend itself against nuclear attack by holding outlying fortress areas on the ocean oases, the old Seafarer's Islands. Secondly, it will hold its own inland mountain areas in the manner explained. Thirdly, it will seek to advance its nuclear groups from the oases to more extensive land-spaces possessing mountains, and from there to reach into the enemy homeland.

So we will see along the mountain borders a complete area of fortress defences sited firstly to reach into the enemy's country to destroy his power of manoeuvre, his fighting strength and his means to move it. Secondly, to absorb the airborne attack whether of aircraft alone or of a trooped army; thirdly, the local defence to throw back the local land attack. We like to think that within the fortress areas could be installed a whole industry to keep the production of energy going throughout the campaign.

Any powerful state will be ready for war, and though it may have no intention unless forced to it of being an aggressor, at any rate no aggressor, knowing its state of readiness, will dare open this war against it with an airborne invasion. Before anything of the sort, which should be the crowning achievement of the war, can take place, it is necessary for him to subdue the defences of his victim. He will therefore set to work, by pressing his bombardment weapons as far forward as possible, to conduct a short range and accurate bombardment of those points which he knows by reports of agents or by his detector apparatus to house the nuclear defences and industries.

It is this bombardment which the defender must not only resist, but subdue. For both opponents to step this attack forward there will be the neutral mountain areas that lie between them. It looks as though those areas may be quite vital to the opening of the war, and that bombardment weapons will be at once carried into those areas by aircraft unless the neutral countries which own them are sufficiently advanced in warmaking to resist the incursion. In the latter case they will undoubtedly attempt to keep both contestants out of their country, but they will in the end fail.

One or the other will enter, and that move will be one of the first steps of the war, for on this success may well depend the ability of one of the contestants to enter the territory of the other. The war then opens with this move.

^{*} There are also the "air passes" to be defended. These are the landing spaces for heavy airborne forces.

Let us give that move to the aggressor. The defending nation is now subjected to a hail of both short and long range rocket projectiles of great power and great weight. Any surface industry that it possesses will soon be put out of action by predicted fire, or even by fire launched by "indirect" observation from aircraft.

Only those industries which are properly covered in the mountain and valley systems will continue to work. No railways will be running; the road system will be torn to pieces wherever there are centres of communications or difficult defiles such as river bridges. Thus, we come back to the ancient pattern of war, in which the fortresses must each be self-contained to hold for a given time. Communications from one fortress area to another can only, it seems, be by swift aircraft, although we may find a means of launching both passengers and freight by rocket.

So now we have a picture of the countries of the belligerents parcelled into fortress areas, each fortress area being a system of fortresses in the hill regions.

Industries which are on the plains and are dispersed in, for instance, the banks of deep river beds, will mostly escape damage from bombardment, but they will be very vulnerable in the end to the airborne attack. It must be admitted that if the installations which provide the life and fighting power for the people are scattered in covered positions of this sort all over a country of great land-space then they will be very difficult to put out of action by any bombardment, even by atomic missiles. But if they are scattered, then communications between them will be most difficult over the face of the flat land, and it will be an immense labour to tunnel the many miles between them. Therefore we will hold to our solution of putting our fortresses and industrial installations into the hill areas.

The hill fortress system will have to be produced on a suitable strategic pattern in such a manner that war industry may be kept going, that people may be safely housed against bombardment and that all the granaries of those areas that are within effective range of the probable enemy may in peacetime be emptied into the great stores within the fortresses. The nation will calculate that vast agricultural areas of its country will not be in bearing during a war. The nations with great land-space are in a better position than are the crowded countries of western Europe, and which to a great extent lack this advantage of mountain terrain and of land-space.

Here we have the defensive lay-out, but with that lay-out a country will obviously never win a war. It will be able to ward off to some extent the weight of an enemy onslaught and to throw back his airborne invasion provided it can keep its defensive aircraft in action. It should be able to do this if they are properly housed in underground garages in fortress areas. Garages must be ready prepared to accept the concentrated force of this air power on every threatened front, so they will have to be very considerable garage areas.

For the counter-offensive the most powerful airborne forces are needed. In considering the launching of an attack or counter-attack of this sort we have to remember that time is now a matter of minutes where in the past it was a matter of days, so it is very doubtful whether any form of offensive which cannot cover great distances in a very short space of time will ever be able to grasp the opportunity before the enemy can recover his balance after a heavy bombardment. Thus the main offensive forces will be aircraft and airborne land forces, although the slowly moving land forces will after a very long time and after the airborne forces have at any rate achieved their main objective, come rumbling in carrying heavy bombardment weapons, heavy supplies and heavy equipment.

More and more, however, it becomes apparent that the success of the offensive will depend on the almost complete mutilation of the enemy's ability to resist, for if an enemy is still left with ability to throw up a pretty strong anti-aircraft defence of the sort that we are now considering, then it will be only with immense loss that the attacker can ever achieve a landing, particularly in the mountain areas which he must penetrate in order to settle his account once and for all with the defence.

The mere fact of landing in an enemy country will mean that the defender's fire in countering the attack after it lands will be devastating to his own country. More than ever is it necessary to hold the enemy out beyond one's own borders and never to let him in.

We will now recapture the picture of the victim at war in this perhaps not too distant future.

His fortress areas are resisting the enemy bombardment by putting up from as near the borders as possible the heaviest counter-bombardment that he can fling over. Rearward fortress areas in other mountain ranges are taking part with long range bombardment in the defence of their country. For the purpose of the ultimate offensive these same weapons are also being used.

The primary object of both defensive and offensive weapons is to attack the enemy's nuclear power of making war by smashing at his nuclear industries and at the communications which serve them. So long as the defender can maintain his firepower, so long will he remain safe from airborne attack, but until he can subdue his enemy he cannot launch his own counter-offensive through the air. Most of his fields in vast forward areas are under fire, and a great proportion of whatever harvest has not been garnered in before the outbreak of war will be left.

In the mountain areas, farming will to quite a considerable extent continue, but he will have lost the produce of much of his fertile plainland. Nothing will be coming in by sea to the ports, for those ports will be easy targets. Perhaps this is a too extreme view even for those later days, and perhaps it will be very many years before we can accurately launch the rocket projectile some thousands or even hundreds of miles to strike a port or to smash communications. Let us allow then that the more distant parts of a great land-space may be able to carry on its agricultural activities, and that by air it may be able to lift a great deal of the products into the harassed areas. But even with this a populous country will soon starve. It has no chance of maintaining a great population for long and must either watch them die or give in soon after it allows the enemy's bombardment to reach to a height at which it ceases to be able to till the fields over any considerable region. Apart from anything else, it looks as though the issue of the war will turn on the matter of supplies of foodstuffs, and that the war will not last long.

For war of this nature the factor of population is important. It must not be too great for its land-space and the fertility of its soil. Means of crop production which are economical in manpower are obviously of great advantage. India is in a very weak position in many of these respects. Land-space she has but she possesses a huge population, mostly agricultural, and by tradition and custom she is to a great extent prevented from using economical means of farming.

If the war does go on then, the defender's counter-offensive after he has subdued his enemy's defences and after he has isolated from all help, from reinforcement, firepower or supplies, the fortress or fortresses selected for attack,

will be launched through the air to land on top of this enemy fortress area in the hills. The general bombardment will continue until the airborne forces come into its danger zone, at which time they themselves will take up with their own weapons the close support bombardment for their assault.

The purely land forces, it seems, will have little or no land offensive role as we conceive it to-day. If the aggressor were intent on passing land forces overland to the victim's mountain barrier, these slow moving land forces would present a sitting target to the frontier "guns," especially as they filtered through neutral mountain defiles and narrow places. If the attacker decided first to suppress the frontier defences in order to invade by land, then he would have to suppress them all, for only a few "guns" with this huge destructive power will be needed to clean up a land-moving approach.

It is hard to suppress completely all the batteries tucked away in forward mountain defences. I do not think that such a costly, slow and cumbersome method of moving an invasion force could in those days be employed at all. Moreover, in those coming days of great speed the concentration by land of an offensive bombardment group strong enough to beat down the fire of the defence should be impracticable. If I am right, then it may be taken that the purely land forces are heavily "armoured," "positional" or "occupational" forces which occupy and hold suitable positions and instal their offensive and defensive long range and heavy weapons after other forces have conquered the area. The main invasion will be airborne: the land invasion a subsidiary to it. Even then, these land forces will probably often be flown into position as they go forward in order to avoid lobs from the enemy's land positional frontier defences and hostile populace.

The other land forces will all be airborne, even those which will first go into the enemy's underneath fortresses to rout them out and so to cap the victory and finish the war. These assault forces for the underneath will be the leading

assault and siege forces.

The "positional" land formations will only be those needed to man the "guns," big and small, defensive and offensive, of the bombardment groups, both land and anti-aircraft and the counter-offensive forces whose business it is to destroy the enemy's airborne landings on the ground which may threaten the fortress or fortress areas or the communications between them by air or underneath; and the underneath garrisons which repel penetration into the fortresses themselves.

Land armies as we know them to-day will be out of date.

Since it is the airborne army which leads the assault on the enemy's positions, then the defences must be softened up to facilitate the approach by air and the actual landing. That means a prolonged bombardment of the enemy's weapons in his own country. It may be expected that his anti-aircraft defences with their huge area of destructive effect will be strong enough to preclude flight over his territory until they are to a great extent subdued. Our aircraft will thus not be able to carry bombs over, or to look directly in on an enemy country until the anti-aircraft defences are in great part dealt with.

This means that the first act of war is to put our opponent's anti-aircraft defences out of action by rocket bombardment from the home country, and from whatever advanced bombardment bases we are able to seize and secure: the second, to destroy his resistance to airborne attack. The latter object is attained both by bombardment of his land defences and by the great air battle which will without doubt rage over the probably vast No-Man's-Land lying

between the contestants. Obviously, in attaining this latter object one is also suppressing his bombardment weapons by one's own counter-bombardment.

Thereafter, the airborne attack is launched and the siege train follows on its tail by air: the land forces, if time admits, bringing forward under this cover their land bombardment weapons and heavy administrative train.

To fit all this into a more familiar setting we will consider insular Ruritania as the fortress of Tobruk-Gambut-Bardia and Insular Erewhon as the fortress of Derna-Martuba-Mechilli, without allowing the intrusion of airborne forces within this small setting.

Before the Ruritanian forces can break into the Derna fortress area they must neutralise the fire of at least one of the fortresses, let us say Martuba. Yesterday we would have done this by getting control of No-Man's Land and bringing up heavy guns to within range of the place. Tomorrow Ruritania might in the same way press forward to the neutral mountain areas or ocean oases to emplace her heavy batteries. To get our heavies forward towards Martuba we have to drive off the enemy's army of manoeuvre; to-morrow we drive back his airforces which are operating over the immense No-Man's-Land between the belligerents. In this latter battle the ground anti-aircraft "guns" will play a quite considerable part in support of their own airfleet against that of the enemy.

We set to work to bombard with all weapons that can bear on Martuba; tomorrow we will be able to bombard from the homeland where countries lie close to each other, as well as from the forward neutral positions that we have captured. (We will later talk more about war between very distant insular powers.)

As we subdue the fire of the fortress and drive off the enemy's army of manoeuvre, we in our turn close in with our field army and our heavy siege train moves up: tomorrow we destroy the airforces that are protecting the homeland, and as we subdue the fire from his great bombardment groups we fly in our airborne troops, followed by our airborne siege trains and if there is time step up our land bombardment weapons.

Now look still wider. Here we have spoken of only two insular areas: imagine the day when the African insular area is a thing of international account, the Indian Insular area, with the Western European insular area? North American, Russo-Siberian and Chinese system of fortress areas also in being. Any of these may go to war, stepping forward their bombardment weapons as they see fit, trampling down the weak neutrals who lie between them, throwing their huge projectiles from the homeland into the enemy country; flying out their air-fleets for battle in the great No-Man's Land, supported in their fight by the ground bombardment groups advanced to help them and by the huge airborne battleships, and finally, launching the airborne assault perhaps across the Arctic Circle.

And where does the Navy come in? It is little faster and more exposed than the purely land forces; it can barely live at all when nuclear war becomes general and fully developed: the monitor,* in some form or other, may still have a place but little else of the Navy will be useful. For peacetime policing along with Imperial land and air forces it has a place: in future nuclear war it becomes unimportant unless we find some means of rendering our ships virtually unsinkable.

^{*}Used here as a generic term for all seaborne, carriers of landward and airward bombarding weapons.

Immense mobility on the part of our armies of manoeuvre and the great power of the bombardment weapon, which either recognise no flank or can create a flank, have forced nations on this huge scale into a system of fortress areas. With great mobility of air power administration for the arm of manoeuvre is becoming reasonably simple.

We need to know more than I know to-day of the type of weapons that we intend to employ for the final drama, the last land battle before we can say how it will be enacted. I do not doubt that the pattern will be little different from the familiar one of the past.

It does seem that by the time the preliminary softening bombardment between two great insular areas has gone so far that one of the belligerents is ready to take the offensive, the surface of both countries will be so devastated as not to be worth habitation. Surely war of this sort can never be worth while; if it is not then, since the primitive weapons of to-day will never make a war of the future, great and irresponsible nations will constantly seek for some other manner in which to gain their ends. This other way could, I think, simply be a far more extended, comprehensive and far more intensive form of peaceful occupation of the desired country than we have known in the past, such as the formation of secret societies and the gradual occupation in a peaceful manner of one country by another, the absorbption of its resources and the diversion of its prosperity to the country and people of the aggressor. Short of making war it seems that for the victim there is no defence against this, unless we are to suppose that a new League of Nations is able to prevent an insidious thing of this sort from continuing.

Just now and for a few years yet to come the picture of war will not be so extreme as I have painted it. We are not yet able to send great rockets over thousands of miles with accuracy enough to hit the pin-point of the town or the industry or the port. Industries suitably dispersed and well tucked in over a great land-space will still have quite a good chance of survival. India is lucky in her land-space, vast as it is.

Air forces will remain for a time the most efficient means of taking the missile to destroy the particular distant target. So they will still carry the bomb to the target while they and land power and seapower will still work together to press the airfields forward within close range of the target and to press the nuclear land rocket, etc., bombardment forward to positions close enough to the target for effective fire.

A war would still open with a great struggle for air supremacy, a struggle vital to the issue of the war. On it hangs everything. Atomic energy will be laboriously produced for a time yet by only a few nations. Land armies of to-day's pattern will be used until such time as atomic offensive and defensive land fire is capable of blowing them away like thistledown. Navies of aircraft carriers, submarines, escort vessels and monitors will be needed for a little while yet.

That is to say, the ways of making war in the near tomorrow will be much the same as those of to-day, but bit by bit fire-power will increase hugely in devastating effect and in range and improve greatly in accuracy. Probably the atomic land and anti-aircraft defence at the borders and on the surface of a powerful country will at some future period be too strong for the land and airborne attack, and we will for a time get a new sort of stalemate, the future equivalent of the lines of 1914–18, with the airpower of neither contestant able to penetrate the nuclear anti-aircraft screen in any decisive force.

But life will even in the near tomorrow be almost impossible on the surface of the Earth, for only a few big nuclear bombs dropped by hostile aircraft will flatten out great areas and devastate to the fields. A war cannot go on for long like that: starvation will end it.

The final period will come in the days when the war of manoeuvre will once more flow like rivers of molten lava across and across the Earth, patterned by airpower and tremendous bombardment.

The whole nation, a great part of the world in fact, is determined that there shall be no more war. I hope that I have shown that in spite of this there are irresponsible nations who may yet seek war, and that all the secrets of nuclear power must not go to them until it is safe for the others that they shall have them. The conclusion must be that the democratic powers shall hold this great power for war in their hand until such time as other countries shall have constituted for their own government a fully-fledged and working form of democracy.

For our Commonwealth we now need some body of mixed military and civilian experts to work out very completely exactly what types of weapons and types of units we need for our land and airborne forces. Here it is apt to emphasise how important it is that our cadre of officers shall be intellectual men and scientifically-inclined, for this is a deadly business in which they are engaged.

Science, or perhaps the engineers, had us in control between the World Wars, and inevitably plunged us all ignorant into this latest torment. We must at long last gain control of science. As a soilder, I do most strongly press for some sort of central body for research and development in our services, representative of the main activities of learning and of material development in the nation as well as of all those men who have the making of war.

This is necessary, but how much more necessary that we should have some central research body which can produce for us from its fund of knowledge and experience a national design for living that is ahead of all scientific developments, and which can tell Science what it is required to do, then ensure opportune release of its discoveries and thus prepare us to assimilate scientific novelties into the national way of life, rather than that we should be left to permit Science to dictate blindly to us how we shall live while unwittingly we slide down the old abysmal chasm to war.

More necessary still is it that there should be an international body of some sort. Over the face of the country we have the electric power grid; will there not be, over the face of the world at some future time, the nuclear power 'grid', perhaps in the form of subsidiary power plants from which this power can be distributed by whatever is the best means. The subsidiary power plants would presumably be the off-shoots from the main international plants.

Can we not start thinking in terms of the improvement of this world in which we live, rather than in terms of improvement within just a nation or some unified region? There are great spaces of the earth which are desert and which with the new resources now come to our hands can be made to blossom into fertility. Imagination builds yet other great projects. Surely we can form some international body which will direct the energies of all nations towards these great improvements in the world which no single nation can undertake, and so divert the attention of nations from the greedy desire to snatch from eech other those things which they feel they like and have no means of acquiring by peaceful methods?

Now that we are speaking of international control it is well to admit that it is as impossible to stop men from researching into nuclear energy as it is to stop them from thinking dangerous thoughts. It seems to me that the most we can do is to make it of little benefit to them to continue the research and so reduce the numbers of independent research workers and national laboratories to a controllable figure. There may be other means of doing this, but I suggest that one way is to equip lavishly and control efficiently an international research establishment that will constantly be many leagues ahead of any independent national or group or individual study of the subject. This establishment must pay and pay highly to buy up all the best scientific brains in the world. Periodically its findings must go to all whom they may concern.

Is it beyond the bounds of what is practical that all research of this sort which is outside this establishment must be licensed, so that a check can be kept in the same way as is the check on illicit distillation and on the drug traffic? One thing that is certain is that with the discovery of more and more sources of raw material it is quite impossible to control the production of raw material for conversion into nuclear energy. Very soon it is to be found over the world in considerable quantities.

In close touch with the international establishment there should be all other international research associations, for we are at a time when discoveries are frequently and rapidly to foreshadow the coming changes in our way of life and, as I have said, we must be in control of scientific development. If we are not, then no new development must be released to the world or to any nation until they are ready to use it beneficially. To be ready for it means among many other things, that we must be able and willing to control its direction, its uses, and its power.

If there is to be an international establishment to produce all new energies, then from it will come the most up-to-date types of bombardment weapons, so it seems logical that at that establishment these weapons should be made, and from that establishment or its branch establishments under its control, they shall be fought.

Lacking these latest bombardment weapons the nation which attempts aggressive action against another will be at a sad disadvantage, for it will not only be wielding weapons of low efficiency but will also have no defence against the newest weapons, internationally produced and fought. Without national fighting power I think that a nation must cease before long to be a nation, for it has no ultimate physical barrier to erect against any other nation and no physical means of imposing its will on another.

As developments proceed it is probable that the most valuable sources of raw material will from time to time be found in one area and then, perhaps, exclusively in another, until such time as we discover how to use the more common elements. Since energy is the most important material thing of to-day it is inexpedient that, as with oil, any country or group of countries should be allowed to keep its monopoly.

I do however hold that for a time yet the democratic nations shall do all they can to monopolise any raw material on which they can lay their hands, but in the end I do envisage all sources of energy being available to all people of the world. In any case, if the transformation of the raw material into energy only be efficiently done at the central international establishment, then monopoly by a single nation can at once be controlled. One hopes that this central

establishment will not release a new discovery until society is ready to accept and use it beneficially.

It seems that there should be or will be a great increase in the material wellbeing of all peoples. It is of course questionable whether, in the great scheme of things, this is for the best. The more our property and the more our belongings and material encumbrances, and the less our physical and moral burdens and hardships, the less our spiritual wellbeing and improvements. For the development of courage and of endurance this is a grave defect if ever war is again to be forced upon us.

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More often than one can quote, history shows that the frugal and hardy peoples such as the tough horsemen of Jenghiz Khan have rolled over the lands and peoples of more prosperous and less hardy nations. But perhaps it will not be merely the toughness and physical courage of the past that will be needed for any future testing times: maybe we need some other form of these qualities.

However, one thing does seem certain, and it is that we badly need both nationally and internationally, some body that must set out for us the new "design for living", and that that body must have the help of philosophers and students of ethics.

In this article I have striven to show in the first place how useless it is now to go to war, and yet how probable it is that irresponsible nations will wish again to fight. If they must fight, then I have tried to show what the nature of war shall be, and lastly what immediate means there may be to prevent the knowledge of and power to handle the most deadly weapons from getting into the hands of the wrong people.

Finally, we know that there is only one way by which war can ever be stopped. It is that all national boundaries shall be eliminated, and that all nations shall circulate freely throughout the world and that we shall all in this way be citizens of this World. Science has in reality made us all citizens of the Universe, yet here we are still lagging behind Science, not yet even citizens of our own World. Here in our hands is surely a great instrument by which, using all other means as well, we can wipe out all these boundaries and can regard this whole World of ours as our own territory, to be improved for the wellbeing of all Humanity.

I do not know of any matter that is worth discussing at any meetings of of any Foreign Ministers which can bear any comparison in importance with this one great problem, the solution of which we must resolve at all costs in time and effort. Great Britain and the United States can set the example by being the first to unite, the first to break down their national barriers.

LIFE IN POST-WAR BRITAIN

By Major-General Sir Dashwood Strettell, K.C.I.E., C.B.

WHAT are the most useful articles to bring Home these days? As the problem of clothes and materials is unlikely to improve during the next six months (better class suit and dress materials are to be produced only for export while other standards of cloth will remain in short supply), here are my suggestions.

Men should bring home flannel trousers, tweed sports coats, cotton vests, pants, shirts and pyjamas, all of which can be made in India, and compare favourably with English goods. If purchased in England, of course, they use up valuable clothing coupons. Ladies should bring with them underwear and woollen and other material for dresses. Cotton dresses had best be made up in India, as labour charges in England are fantastic.

As regards household goods, bring small carpets and rugs. Here they are only procured at prohibitive prices, and manufacture will be delayed for some long time. Curtain material and loose covers should also be brought, as well as bath and face towels, dish cloths, dusters, soap flakes and soap. All these things can only be obtained in exchange for coupons. Those who make a practice of sending food parcels home and those who arrange for their despatch after they leave India, should send sugar, butter, raisins; a very acceptable item in a food parcel is a tin of salmon, which is highly pointed in our food ration scale.

If possible, passengers should come Home in May or June, for the early months of the year are a bitter trial to those from the East, and "queueing" in the wind and rain is sheer misery.

Municipal elections have just been held here, and the result was the same as in the General Election—a distinct Labour victory. The reasons? Good organisation on the part of Labour, lack of organisation and apathy on the part of the Opposition. In our own municipality, names of Conservative and M. R. candidates were posted up less than a week before the election; there was no house to house canvassing and only one meeting and that occurred on the eve of the poll!

Main item of internal news was the dock strike, which was notable in that not only was it unofficial, but the organisation controlling it was exceptionally good. Fortunately, the Government stood firm on the necessity of negotiations being carried on through the recognised channels, and the dockers are now back at work for thirty days, pending negotiations. This "rash" of unofficial striking has disturbing possibilities. At the moment, while labour is short, the hot heads are in a good position to stir up the workers, but in the not distant future it is hoped that the Trade Unions will reassert their control. Generally in these disputes there are two sides to the question, but when a strike occurs the majority of the Press is so biassed that the man in the street is left in the dark as to the rights of the case.

The dock strike did not help the food position, which even before the men came out, was not improving. It seems to be a matter of distribution rather than actual shortage. For instance, in our district of London for the last two months we have been unable to get any salt at all. We knew it was plentiful up North for we received some through the post. Food authorities

seem to have been upset by the return to London of one and a half millions of evacuees, but that such a thing should upset a Government Department is not a great tribute to the foresight of that Ministry!

Problems of accommodation are getting worse. Demobilised men are howling, and quite naturally so for house building and repairing is carried out in such a leisurely manner. The slow progress in this matter of building is not all due to lack of labour. I have watched, with disgust, the leisurely manner in which bomb damage is being dealt within our part of London. Six men, three at each end, hoist and lower a small bucket the size of a pail, containing debris from the higher floors to the ground. The fact is that any competitive incentive between contractors is lacking, and if this type of work is a real example of labour under Government control, Heaven help us.

The partial truth at the bottom of all this industrial unrest is that everyone is tired, physically and mentally. The rations, though sufficient, lack variety; things are expensive—very expensive—compared with those before the war; and it will take time to get things back to normal. But demands for higher wages, sometimes on the assumption (an incorrect one) that the Labour Government will back them, are of no use; the Government is composed of sensible men. Moreover, there is a limit to such demands, and trades and industries, whether nationalised or otherwise, can only pay wages that are economical.

Many members of the Institution will remember Lord Gort when he was Director of Military Training at A. H. Q., round about 1935. They will have learned with deep regret of his decision to resign his post in Palestine through serious illness. Gort's great asset is his transparent honesty, and without doubt that characteristic has, more than anything else, earned him the well-deserved and high tributes paid him by Arabs and Jews. One of the officers serving with him said to me only yesterday: "Everyone trusted him." It is sad that he should have had to resign at this critical juncture in Palestine's history, and, knowing the man, I am sure it must have made the pill more bitter still.

I have seen the official film "Victory in Burma." Having been a member of a small expedition into north-east Burma thirty-three years ago I can testify to the success of the producers in making the background vivid. As to the subject matter of the film, all those who took part in the Campaign receive their just tribute. My only criticism is that the film dwells too much on the climatic difficulties; a little more should have been devoted to the final rapid advances and thus made the film a little more balanced. On the whole, however it is a great picture and a great tribute to a Great Army.

The cinema at which I saw the picture was fairly full, but there was no queue, and I heard one of the attendants say: "Oh! we don't want any more war films!" This is a sign of the times. Already a post-war anti-military wave of thought is creeping in. Military correspondents articles in the Press appear only occasionally, though there is plenty of material for them to write about. It looks horribly as if, unless we are careful, we are sliding into the same nonchalance as regards Defence as we revelled in before the war. I hope it is not the case. If it is, the returned soldiers should have something definite to say about it—if they don't, their wives will.

We must somehow come to some international arrangement by which we can banish war. Till then we must remain prepared. We must banish war, not only because it is nonsensical and horrible, but because any future war will mean total destruction.

AN EMERGENCY RESERVE OF OFFICERS

By LIEUT.-COLONEL Y. S. PARANJPE.

NATIONS with small professional armies always find themselves at a disadvantage when they are suddenly drawn into a war of modern dimensions. Their policy, of necessity, has to be one of "peace at any reasonable price." Power politics are usually a direct result of conscript armies, which are always ready to take immediate and drastic action against those who do not see their point of view in world affairs. In this age of lightning wars the former are, therefore, often forced into a war and annihilated before they can prepare themselves for a successful resistance.

Countries like England, with a sea-moat all round her and a powerful navy to prevent a sudden onslaught, are comparatively safer than those with long land frontiers. India comes under the latter category of countries, with all the connected disadvantages of having: (a) a small professional army, (b) a land frontier which has been a source of trouble, (c) a long vulnerable coast line, with only an infant navy to protect it, and (d) well-armed and powerful nations within striking distance of her frontiers.

India cannot maintain a large professional army in peace time owing to financial reasons. She has the necessary manpower, however, to enlarge the army in case of an emergency. In the circumstances, the next best thing is to have an army which can be expanded in the shortest possible time into a formidable force, strong enough to halt the first onrush of the enemy, so that further expansion can continue behind this screen, undisturbed by enemy action.

Such quick expansion is possible only if sufficient number of trained reserve personnel of all ranks are available in peace time. The formation of a large reserve of the lower ranks of the army is comparatively easy. It can be done by various expedients, such as shortening of the colour service and authorising an increased strength for reservists. The building of a reserve corps of officers is, however, a different question. The cadre of regular officers cannot be turned over like that of the men, primarily, because the professional officer is the nucleus around which the expansion must be built; and secondly, for efficiency, experience and continuity in training, the officer class must have long service. To obtain the necessary reserve of officers, therefore, a separate corps of reserve of officers, which can be called up on mobilization at a very short notice, must be formed.

Difficulties experienced during the present war in the sphere of officer recruitment are well known. At the beginning of the late war the only reserves of officers available for the Indian Army were the A.I.R.O.; I.T.F.; A.F.I.; I.R.R.O. and S.U.L.

Officers and the potential officer personnel of the first three were very partially trained, but many of them held key jobs in commerce, and, as such, were either not available for service or could not be immediately released. The I. R. R. O. and the S. U. L. were, in the majority of cases, too old to take their places in regular units. They, too, were also very few in number.

Promotion of suitable men from the ranks was the only other immediate source. Due to a lack of higher education amongst the V. C. Os. and O. Rs. of the army, the numbers obtainable from this source were very limited. Officers promoted in this way can, in the majority of cases, be good enough to command companies of Infantry or equivalent units, but they cannot fill the appointments

in the rapidly expanding staff or technical branches. The political situation in the country and a lack of proper military training in educational institutions prevented a large number of the right type of boys in India offering their services.

The shortage had to be made good by importing a large number of British and Dominion personnel from outside India. Apart from the difficulties those countries must have experienced in sparing these potential officers, when their own commitments were heavy, other factors prevented the Indian Army from obtaining full value out of them. The way most of them adapted themselves to the new conditions was very creditable indeed; but they were new to the country, lacked knowledge of the men and their language, and there had to be a considerable time-lag before they could take effective command of their troops. Such delay may prove fatal in another war.

The officer supply, therefore, could not keep pace with the furious rate of expansion of the army. Fortunately for the country, we got a breathing space of time before Japan entered the war; and a further respite when the Japs halted after their Burma conquest, thanks to the naturally impenetrable Indo-Burman frontier. It has been a narrow escape; and not to draw lessons from it and plan for the future is to court disaster when another emergency suddenly arises. A farsighted scheme for the provision of officers is very necessary. It should consist of the formation of a well-trained officers reserve, which should fulfil the following conditions—

1. It should be of sufficient strength to allow for the desired immediate expansion of the army, based on defence plans.

2. Its members should be sufficiently well trained to take their place,

without further training, in the lower officer ranks of the regular units.

3. They must all be young and physically fit to join the units on active service.

- 4. They must belong to all arms of the service, so that the expansion is well-balanced.
 - 5. They must be readily available to be called up in case of an emergency.

In most countries of the world the majority of the army officers come from the middle class. It is said that in India such a class does not exist, but that is not strictly true. It does exist, but it is comparatively smaller in proportion to the total population than that in the western countries. It is the class of people whose income ranges from about Rs. 200 to Rs. 1,000 per month. They may be government servants, employees in private concerns, traders or farmers, but they are a progressive people with advanced ideas, and give their children good education in good schools, universities and technical institutions, which are usually affiliated to the universities. The universities are the reservoirs holding the young men suitable for the army and in search of new careers for themselves.

This concentrated source is the one that must be tapped to the fullest extent. It will give us arts and science students, engineers and doctors, all of them wanted in the army. There are a number of universities in India, with thousands of students passing out every year. It should not, therefore, be difficult to obtain the necessary number of potential officers from them.

The strength of the Reserve has to be decided by A. G.'s Branch, based on the plans made by the General Staff. If, for the sake of this article, it is assumed that the immediate expansion, in an emergency, is to consist of doubling the peace time strength of the army, and the peace time officer strength is 7,000, then the Reserve officers should number 7,000 of all arms.

Having fixed the figure, the various universities in India should be given a "Quota Figure" which they would have fill within a certain time. This should be done on a voluntary basis from the U.O.T.C. The quota should be divided up into the various arms of the service for which the officers are required. For instance, the figure for any one university can be:

General duties (Infantry, etc.)	350
Engineers	50
I. E. M. E. and Ordnance	40
Medical	50
Veterinary	10
Total	500

The time limit for filling the quota will depend on the anticipated date of the next war, and for the sake of argument we might put that at twenty years from now.

The average age of a student graduating from a university is about 20 years. The age limit for remaining on the roll of the quota should be fixed at 30 years for all branches, except the medical, whose age limit may be 35 years. In other words those placed by the university on the roll should remain on it for ten years, which would ensure that the officers remain fit for active service.

Wastage, as a result of the age limit, will necessitate the university having to fill its quota in a period of ten years. After this period the first year candidates will be over-age, and will have to be struck off the roll. This means that the annual intake for a university with a quota of 500 will be fifty. To this must be added about twenty per cent. more candidates, to cover casualties during the ten years, making the final figure of sixty officers per year.

SELECTION

This should be done each year by an Officers Selection Board constituted on the same lines as at present. Selection should be from amongst the members of the U.O.T.C., and those who pass the tests should then be placed on the quota roll by the university.

Experience has shown that a very small percentage of those presenting themselves before the Selection Board pass the necessary tests. Better training in the U. O. T. C. and preliminary coaching in the colleges will certainly produce improved results, but to obtain sixty suitable candidates per year may, however, mean increasing the strength of the U. O. T. C.

At present the training given in a U.O.T.C. to an arts student or an engineer, a law student or a future doctor, is exactly the same. They all do very elementary Infantry training. Instruction, in future, should consist of a preliminary period of basic Infantry training common to all, followed by specialist or technical training depending on the inclination of the student and the type of the institution. For example, an engineering college student normally does two years in a science college, where he should receive basic Infantry training, and when he joins an engineering institution he should be trained as a Sapper. For the students to obtain sufficient benefit from the instruction, the standard of training in the U.O.T.C. must be improved and their equipment modernized.

After graduating from the universities, all students on the Quota Roll should do an attachment of three months with units of the respective arm for which he was trained. This should be done during the first year after leaving the university. After this initial period of three months, further short attachments

of three to four weeks' duration should be carried out every year, until such time as the candidate is taken off the roll.

Training during these attachments should be such, that after the first three months with a unit the candidate should be in a position to take his place as a junior officer in that unit. This, of course, will only be possible if the U.O.T.C. training is of a sufficiently high standard and is seriously carried out. Further annual attachments should be in the nature of refresher courses.

To encourage students to join the U.O.T.C., and also to compete in the filling of the quota, a selected number of members of the corps should be given permanent commissions in the Regular Army. Ten per cent. of the total permanent commissions given during a year should be reserved for them. In technical arms a slightly higher percentage may be allowed.

After their first attachment of three months student-reservists should be granted commissions in the Reserve of Officers. Pay and allowances applicable to regular officers should be made equally applicable to them during their periods of attachments and until such time as they are borne on the strength of the Reserve.

Their promotion during their ten years of reserve service should be on a time scale, so that they attain the rank of Captain in the reserve before they are struck off the roll. When mobilized their status should be the same as that of the regular officers for all purposes.

A large number of officers will, in peace time, be in civil or private employment. Regulations will have to be framed regarding their release for short training periods, and also when called up on mobilization. Some may be in key positions and not immediately available, and careful study of this aspect of the problem will be necessary.

The reserve might be styled "The Emergency Reserve of Officers." There are many different kinds of reserves in the Indian Army at present and it is worth considering whether they should all be maintained. The formation of one reserve under one head and governed by one set of regulations will simplify its organization and peacetime administration. The A.I.R.O., A.F.I., I.T.F., etc., can all be grouped under one common head of the Emergency Reserve of Officers. Some members may serve with territorial units and will take the place of the I.T.F.; while others will only do attachments as suggested above, and will be the equivalent of the present A. I. R. O.

This suggested scheme is not expensive. Apart from the additional expenditure required for the expansion of the U. O. T. C., which will be useful not only for this purpose but for a total mobilization, the only financial commitment will be the pay of 7,000 officers for a period of from ten to twelve months during a total of ten years. This works out to an equivalent of maintaining a cadre of 600 to 700 officers permanently, only about a hundred of whom will have attained the rank of captain.

This scheme will provide a reserve large enough to double the army strength. It will ensure an expansion in all branches of the army, including the technical, which is essential in a modern war. It will also provide, in twenty years, a further four to five thousand officers of over 30 years of age, who can be called up for duties in the rear areas and for less active duties. I have, of course, only dealt with the question from the point of view of the army. A similar scheme can, with suitable modifications, be made applicable to the R. I. N. or the R.I.A.F.

INTERNAL SECURITY

By "Pax."*

INTERNAL security, or internal defence, as it is sometimes called, is not war. It is much more complicated and far less interesting. In war you look for trouble; in internal defence you endeavour to avoid it. For six years a considerable percentage of men and women of the Empire has been engaged directly or indirectly in killing. Now, with the end of hostilities, the machine has to go into reverse.

"Internal Security" is the term used to describe the help given, necessarily by the Armed Forces in peace and war, to aid the Civil Authorities in preserving or restoring law and order. The measures range from purely precautionary action to the exceptional proceedings which may have to be taken in stamping out a rebellion; and included within the range are all the intermediate stages.

Troops are not police. Their organisation, training and correct manner of employment are quite different from those of the police. Unless this principle is firmly established, we shall fall into considerable error. In some parts of the Empire in the future, the armament and organisation of the police may be modified to include a "heavy component" comparable to lightly armed troops of to-day, and designed largely to replace the Army in internal defence.

No duties are so distasteful to soldiers as those connected with aid to the Civil Power or any development therefrom. The idea of such duties conjures up thoughts of using force against unarmed people; of being faced with situations one cannot comprehend; of being subjected to intense provocation under conditions of strain and extreme discomfort; and, finally, of being adjudged wrong whatever course one has adopted. While the distaste for using force against the unarmed is the natural feeling of a decent individual, the other feelings mentioned must be eradicated. It is merely a question of a little application and considerable training.

An incident of internal unrest often presents the occasion which ultimately causes war, as, for instance, at Sarajevo in 1914. Conversely, a period of extensive war is always followed by considerable civil unrest. Since 1688 the United Kingdom has experienced little civil unrest compared with most of the rest of the world, but the troops of no other nation have had such a varied experience of internal security duty. In recent years as the Empire has grown this duty has been performed not only by British troops, but also by troops of the British Commonwealth, and the extent of the duty has been international as well as imperial.

Between the two World Wars there were, exclusive of the troubles in Ireland, some twenty major internal security problems dealt with by British Empire troops, of which two (Chanak in 1922 and Shanghai in 1927) were international, and the remainder imperial. In some of these considerably more than a division were used.

To-day the world situation shows that far from there being hope that there will be fewer incidents in the future than in the past, current and potential internal security problems are likely to be at least as numerous and serious. Indo-China, Palestine and Java are only some of these plague spots; and only

^{*}In a lecture.

recently there was the dock strike in England. But as the ease and speed with which the world regains its prosperity will depend on how these problems, and similar ones which will arise later, are dealt with, it behoves us to consider this side of military duty intently. The situation brought about by a badly handled I. S. situation may be far more difficult to retrieve than the effect of a lost battle in war.

The conditions under which troops may have to act to maintain or restore order range from riot (or pre-riots) to revolution. They may be considered under three headings:

- (i) Reinforcing the police to maintain law and order, the Civil Authorities still being in control; that is, troops in aid of Civil Power.
- (ii) Still acting in co-operation with the Civil Authorities who retain their independence, but with special legislation to give both civil and military abnormal powers brought in to deal with the emergency; this is still really aid to Civil Power.
- (iii) After the Civil Authorities, even with military aid, are unable to maintain or restore order, and it is necessary to supersede the ordinary law by military authority; that is when martial law is proclaimed.

The forces of disorder which may be encountered in various conditions of civil unrest will vary. They may be economic, political, religious, or racial; or any combination of these four forces. Situations brought about by any of them will certainly require, at times, the use of troops in aid of the Civil Power to reinforce the police, and will also bring about a situation (although less frequently) when it will be necessary to enhance the powers of Civil and Military. It is, however, unlikely that an uneconomic situation will ever require martial law to be applied, and, in most parts of the world, the same remark applies to purely religious situations. Disturbance or a political or racial nature, in which I include Palestine, may require martial law.

PRINCIPLES.

There are seven principles to which the Army must adhere when called upon to play its part in internal security. They are:

Loyalty to Government policy;

Necessity;

Minimum force;

Firm and timely action;

Co-operation with the Civil Government;

Impartiality; and

Good faith, which is ensured if all the other principles are applied conscientiously.

The extent to which civil control has been lost affects the application of these principles; but whatever the conditions ruling when troops are called upon to act, the following general remarks apply.

Government policy must be loyally carried out, and it is not for the soldier to take the law into his own hands. The soldier must advise, of course, as was done so successfully in Cyprus in 1931, and not silently acquiesce in the employment of troops in a manner which he considers to be mistaken. It is equally blameworthy to endeavour to force the hand of Government. Once the policy has been decided, the soldier must carry it through. Although these remarks are particularly for more senior commanders, they do apply to all soldiers.

There must always be the necessity to take action; and if the necessity arises, action must be taken. The soldier is always a citizen, and as such he has the same responsibility as a citizen in keeping the peace. In addition, as a soldier he can on occasion be called upon to go a good deal further, but the necessity to take action must exist.

Whenever the necessity arises to use force, it must be applied to the least degree possible to attain the object. No more force will be used than is necessary to achieve the immediate object. The words "immediate object" must be carefully noted. The general situation must not colour the soldier's action in dealing with a particular emergency. At the same time, action must be firm and timely. There must be no hesitation to accept the responsibility the occasion demands. Hesitation will be interpreted as weakness, will cause more trouble, and in the long run will be more expensive in life and effort. Remember, there must be no reluctance to fire when, and only when, the situation clearly demands such recourse.

Without co-operation with the Civil Authorities, internal security problems can never be successfully solved. Even when the Army is in full control, and martial law has been introduced, the machinery of the civil power should still be used as much as possible, both to increase its power and also not to delay reinstation of civil control as soon as possible. The Army has neither the means nor the experience to take over Civil Government for one minute longer than is absolutely necessary. The Army can do no more than plug the hole in the boat until the Civil Authorities can put on a patch. When the Army is merely in aid of the Civil Power and not in supersession of it, the need for co-operation is even greater. Co-operation does not mean that the thinking is left to the civil officers.

"Impartiality" applies particularly to strikes, communal disturbances, and situations of a like nature. Soldiers generally are very impartial.

Lastly comes good faith. If the soldier acted in good faith he will have acted rightly, and his action, if called into account, will be condoned. In order to act in good faith, the foregoing principles must have been observed.

AID TO CIVIL POWER.

My remarks hitherto have been applicable to the three conditions under which troops may be called upon to act in internal security duties anywhere in the world. From now onwards I shall deal only with one condition—Aid to Civil Power—and that with reference to India. This is, in my opinion, the most difficult condition for all soldiers, except the more senior officers. All officers are aware of M. T. Pamphlet No. 11 (India)—"Notes on Training for Duties in Aid of the Civil Power."

The Law.—There is sometimes a tendency, in training for and in the execution of duties in aid of Civil Power, for officers to become midget lawyers. There have been, I admit, some instances in which the necessary knowledge or observance of the law has been absent, but what is required is a middle course. Certain points of law must be observed; they are few and easy to comprehend.

The law in England and British India has one fundamental difference, to which I will refer later, but in British India the Civil Authorities have power under the ordinary law to disperse unlawful assemblies, and suppress rioting and disturbance. An unlawful assembly is an assembly of five or more persons likely to cause a disturbance of the public peace, and all situations have their origin in "unlawful assembly."

The legal aspect of duties in aid of the Civil Power revolves around:

(a) Whether a magistrate (and a magistrate includes an officer in charge of a police station) is or is not present, or can or cannot be cornmunicated with, and (b) whether the commander of the troops confronted with the situation is a commissioned officer (including a V.C.O.) or a Warrant or Non-Commissioned officer (including a lance rank).

When a Magistrate is Present.—If the unlawful assembly cannot be dispersed otherwise, the magistrate may call upon the commander of the troops (who may be a commissioned, warrant, or non-commissioned officer) to take action and make certain arrests. The request need not be in writing, but should be, if possible. If it is not possible, the magistrate should sign a request subsequently, as soon as possible. In any case, the commander should note the fact that the request has been made in his outline diary, which he must maintain. In case the magistrate does not sign the request, the commander should always ensure that the demand by the magistrate is always within the hearing of two of his officers, N.C.Os. or men.

The commander is bound to comply with the request, and here is the fundamental difference between the law of England and of British India; but this is not an order to fire. The commander is the sole judge of the kind and amount of force (which must be the minimum) to be employed. He is the sole judge of the action necessary, and this action must be limited to the purpose indicated by the magistrate. At the same time, the commander must safeguard his troops and prevent them becoming involved in physical contact with the crowds.

Under the law of England a commander of troops can ignore a request of a magistrate to turn out troops if he does not consider such action necessary.

The magistrate has the authority to require military action to cease when he considers the object has been achieved.

If a Magistrate is not Present.—A Commissioned Officer must take action on his own responsibility if public security is endangered. If practicable, while action is being taken, he must communicate with a magistrate and act as thereafter in accordance with the magistrate's advice, except that if the safety of his force is endangered, he may take action on his own responsibility. A Warrant or non-commissioned officer is not empowered on his own initiative to disperse an unlawful assembly, as such, if a magistrate is not present and does not invoke his assistance.

The Indian law does, however, confer on any member of the general public the right of self-defence; the defence of others and of property; and the right to arrest in certain circumstances. Therefore when any member of an unlawful assembly commits or attempts to commit an act of violence in circumstances which justify the use of force, Warrant or N. C. Os. in command of troops are empowered by law to employ the minimum force necessary to maintain order. Obviously, as the law is framed, troops should always be commanded by a commissioned officer, if possible, when acting in aid of the Civil Power.

There is the law. Observe it, and the soldier is indemnified against all consequences of any action he may take in aid of the Civil Power. It must be applied with commonsense.

METHOD OF EMPLOYMENT OF TROOPS IN AID OF CIVIL POWER.

A certain procedure, observing the seven principles previously mentioned,

has been evolved, and is clearly described in M. T. Pamphlet No. 11—India.

Training.—Training must be carried out in co-operation with civil officers and with the police. The background against which all training in duties in aid to the Civil Power must be silhouetted is the wide dispersion of force which such deties must entail, and the consequent heavy responsibility which the junior officer, and, indeed, the W. O. and N. C. O. have to shoulder. Against this there is the fact that the range of situations which have to be faced is limited, and not inexhaustible. Therefore initial training by demonstration of the various situations to be faced is the best method to adopt.

From the start, create the right atmosphere—that is, that duties in aid to Civil Power are not war. Avoid such words as "enemy," "operations" and "war diary." This may sound simple, but simple things are often missed.

In all this training, work up to the pitch that no situation, however sudden, can non-plus the troops involved. Remember the point about reluctance to fire, always providing it is necessary to fire. Another important point is that of noise. The noise of a mob, harmless or dangerous, can be deafening.

Official accounts of incidents of the past are few; "police operations', unless they develop into small wars, when they are no longer "police operations," are rarely made, and there is not a wealth of recorded experience on which to draw. Therefore any lectures or discussions which deal with actual operations are most valuable.

The actual duties troops may be called upon to perform are limited to:

In the precautionary (pre-riot) period:—Showing the flag; reconnaissance of likely storm centres; reinforcing the civil inter-communication system.

In the active period.—Dispersal of unlawful assemblies; in support of the police carrying out cordons, searches and arrests; patrols on foot or in M. T.; protection of life and property and dealing with individual acts of destruction; mobile columns.

In the aftermath.—Duties as in the other two phases, but to a varying degree.

CO-OPERATION WITH CIVIL AUTHORITIES AND POLICE.

Nothing is more important than co-operation with the civil authorities—the administration and the police; and to co-operate you must know their organisation.

In the past there has sometimes been a reluctance to invoke the aid of the Army in the precautionary or early stages of trouble, although there has never been any hanging back on the part of the Civil Authorities to ask for assistance when things have become serious. The reason for this has probably been doubt as to whether the Army can be trusted to act with good sense. Whether the Army is called upon more or less in the future will depend largely on the size and standard of training of the police, but let our standard of training and our interest in aid to Civil Power matters be such that the Civil Authorities will not be tardy, on account of doubt of our knowledge or good sense, to ask for help in the precautionary or early stages.

Co-operation, to be effective, cannot commence on the day of the race. It must be continuous, and extend through all grades of both parties, and

consist of meeting and training together.

Many a civil official is overworked; and by overworked I mean overworked to a degree that would make a number of Army officers gasp. This tends to put them apart from the Army. Of recent years also, Indianisation

of the Civil Services has tended to draw officials more into their shells, and so increase the isolation which their heavy duties have tended to set up. It is, however, the Civil Authorities who know the problems, and it is folly for us not to meet them more than half-way, and insist on availing ourselves of their knowledge.

As regards the police, we must remember they are not soldiers; are not trained, armed, or organised as soldiers; and only come under command of the Army when they have a prescribed task in a Railway Security Scheme which is in operation. They are trained in the normal police duties—traffic control, arrest, search, crowd control and so on, all of which involve dispersion and physical contact with the crowd. Except for the armed police, they are not armed with lethal weapons. They are organised on an area, and not on a unit basis, and are never collected (and even then, only temporarily) into sub-units larger than a platoon. There is indeed, I understand, a scheme on foot to train police commandos, and this will eventually provide a small much needed reserve.

The isolation in which they work is amazing. It is not uncustomary for a couple of dozen police under a head constable to control a crowd of 500,000 at a fair. You may say there is little control, but I retort there is little trouble. This isolation imposes at times a great strain on the morale and loyalty of the police; and there are many stories, of which the Sholhapur riots and the Red Shirt troubles in the N.-W. F. P. in 1930-32 provide examples, of the devotion to duty of the isolated police constable who has accepted the torture of being burned to death rather than take off his uniform.

In the past, Government has frequently involved the Army's aid once matters have come to a head, whereas if more numerous and better trained police had been available they could have dealt with the situation themselves. Now Government has a wonderful opportunity to increase the efficiency of the police force, and so reduce the need to call upon the Army for aid, by taking on some of the soldiers about to be released. There is food for thought on this aspect in a recent speech by H. E. The Commander-in-Chief, in which he touched on the subject of the use of the Army in internal defence.

INTELLIGENCE.

The base of all intelligence in aid to the Civil Power must rest on police information. This is true in respect of the more serious form of internal security, but is especially true in the case of duties in aid of the Civil Power. A separate military intelligence system cannot be organised, and without intelligence we are blind. Military personnel may well be added to police personnel; this may tend to quicken up the receipt of intelligence. On the other hand, soldiers cannot supplant the police intelligence personnel. The police should be told what information the Army requires, but their personnel must not be interfered with in procuring it.

The value of information is in direct ratio to the speed with which it can be made available, and the degree of secrecy which can be achieved. Means of civil intercommunication are notoriously slow and insecure. Army Signals are able to remedy this state of affairs, and the mere presence of troops in a district may unfreeze the sources of information. Air recce will always be helpful, and information can be disseminated by dropping leaflets from the air. The value of air recce, on the other hand, is limited to situations in which considerable civilian crowds are encountered.

Type of Force.—Infantry, made as mobile as possible by aircraft and M.T., is the most suitable type of force. They are flexible and can easily avoid physical

contact with crowds. Support weapons are obviously at a discount. A. F. Vs. have great moral effect, but in an enclosed space may become a liability. Signals are as important as in war.

Air transport enables economy of force greatly to be developed and, at the same time, reduces the strategic value of rail communications, which can be so easily tampered with in times of unrest. The security of focal airfields has, in consequence, assumed greater importance.

In the future we shall see mobs better organised than in the past. A disturbing factor is the manner in which women have begun activity to participate in civil disturbances. The power of the Press, with its leaning towards sensationalism, is also not a help to the Army; and the weapon of propaganda has also made our task immeasurably harder.

Finally, two points. First, trust those under you. If you trust them, they will trust you. It is not easy in internal security duties to overcome a tendency in those under you to feel that perhaps they may not be backed up in their actions. This must be overcome; and if you train your men well and adequately, they will not let you down in an emergency. Secondly, retain a sense of humour even amidst the stench, sweat, dust and din of an Indian city. It is not uncommon for troops who have been called out in aid of the Civil Power to deal with an unruly crowd to return with a recruit or two from the recalcitrants.

LORDS DEBATE POST-WAR BRITISH ARMY.

VISCOUNT TRENCHARD recently initiated a debate in the House of Lords on the subject of post-war organisation of the British Army. He recalled that a year ago he asked for a broad outline of the post-war Fighting Services, whether the short-service system maintained in the R.A.F. would be extended to the other Services, what form of conscription was to be established. The matter, he said, was vitally important in and outside Britain.

He saw signs in the Press and other quarters that Britain was not looking upon the organisation of the Fighting Services as being of as great a degree of importance as the organisation of other Services, adding: "I note that to some extent sight is being lost already of what the Fighting Services did in the war. Thought and discussion is being devoted to the organisation of Civil services, but even though the atomic bomb has come, I still feel that the three Fighting Services are of vital importance to this country.

"Undoubtedly one of the causes of the late war was our total neglect of the Fighting Services, and our failure to keep them on a proper organisation or adequately manned, trained and equipped. Do not let that happen again. Regrettable as it may be, human nature takes centuries to change. Talk does not change it; speeches do not change it. Much as we may avoid facing the facts, the facts still remain.

"I believe it has been said that the National Service Act is going to be continued for two years. Can anything be said of what is going to happen after two years? Another question is: Are we going to have a Combined Staff or only the Chiefs of Staff as in this war and the Combined Staff College? How are we going to choose our officers in the future? Yet another important matter is whether we are going to have a short-service as well as a long-service system. What amount is to be the pay, length of service, promotion, permanent conditions of long term service? Do the Government intend to keep the three Fighting Services separate, as I hope they will do?"

Developing his arguments, Lord Trenchard said that the Chiefs of Staffs had done wonderful work during the war. Their work should be carried a stage further as a Combined Staff. Selected officers from the three Services, after passing through Staff College, should be sent to a Combined Staff College established in close proximity to the three Service Staff Colleges. Courses should be for 18 months, if not for two years. Those selected to attend should be told that they would not be passed over for promotion by anybody in their own Service.

Selection of officers for the post-war Forces should be on the broadest possible basis. They should not all be selected in exactly the same way. They should not all be educated in the same way. They should not all be drawn from the same type. Encouragement should be given to others who had passed the examinations to go to colleges like Sandhurst, Woolwich, Cranwell and Dartmouth. Others should be taken from the universities after they had secured their degrees. The activities and duties in the Services required that one could put one's hand on all the different types of men that one wanted for different types of posts, and not all from one type of man who had undergone one type of training.

As to the "short-service" system and its relation to the life of the nation Lord Trenchard said: "I would like to see matters so arranged that men, whose main business in life is going to be some profession, could serve in one of the Fighting Services for two, three or four years after they have passed their book examinations, and so rub shoulders with their fellow-men before taking up their professions. The Teachers Superannuation Bill, which enables teachers to be seconded for other work for a period up to five years, and yet retain their pension rights, is a great step forward. Men going into the teaching profession can, after passing their book examinations, join one of the Fighting Services for two, three or four years, and lose no pension rights by doing so.

"What can be done for the teaching profession can be done for the civil servants in both senior and lower divisions, and it could be done for the Colonial Service, too. A great many professions in the Government service and outside could adopt a system by which they could say to candidates: 'You must get through your book examinations, or certificates from schools, or your degrees from the university. You must do one more thing if you want to get a permanent position in our profession—that is to serve for two or three years in one of the Services.' Of course, the Services would have a greater responsibility. For one who intended to join, say, the electrical profession, every effort should be made, while he is in the Service, to give him every facility for studying his profession in civil life.

"This could be done also with regard to the spiritual profession. Would it not be an advantage for those who enter the spiritual profession, first to pass their book examinations, and then, before they are ordained, to do two or three years in one of the Services prior to taking up their curacies? The result would be to improve the spritual life of the country. What a link it would be between the nation and the Services!"

Urging that conditions of pay, service, etc., for the three categories of Service—that under the National Service Act, under the "short-service" system and under the long service system, should be announced, Lord Trenchard said that if those important conditions were laid down now it would ease the demobilisation problem. Some of the professions had adopted this course.

Referring to the Colonies, he asked if more troops from the Colonies could not be employed in the Air Service. "Could we not put up a Halton in Nigeria and a Halton in Singapore, train the young boys there and get the Halton spirit in those countries, such as we have done in Britain? Those boys could do five, six, seven or ten years in the Air Forces, the Army or the Navy. They would be trained in mechanics and mechanical appliances, and when their service is over would be of much more use to their own country."

Lord Strabolgi pressed for the retention of the Royal Naval Volunteer Reserve. During the height of the war, he said, he was told that only one officer in six and one rating in ten was a long-term Service officer or man, and that the rest were temporary in that most highly specialised Service. "The Government have some very great problems to settle concerning defence. We have not yet set up the defence side of the U.N.O. We are going to form part, with our armed forces, of a universal police service to preserve the peace of the world. Until that matter is settled, it will be most difficult for this Government, or any Allied Government to decide on the exact strength and composition of the Forces. American Generals and Admirals have put forward astronomical figures for the American Army and Navy of the future. That is, of course, the way of

the professional chiefs of the Fighting Services—they pitch their demands very high. America, however, cannot settle this question until more is known about the defence side of the United Nations Organisation.

"The present trouble spots of the world are nothing compared with the major problems which have yet to be settled, and until that is done no Government can really decide on the strength and nature of its Armed Forces. The atom bomb is another matter which is going to affect the whole problem of defence. Some people believe, or hoped, there would not be another great war, but there may be minor wars or areas of disturbance. The German military author, von Clauswitz, once drew a distinction between 'limited' and 'unlimited' wars; the former were wars like the Crimean War in the last century and the Russo-Japanese war at the beginning of this century; the latter were wars such as the First World War, the Second World War, the Napoleonic wars. In unlimited wars of the future, if they occur, you will find the atomic bomb used, because obviously its secret cannot be kept for more than a few years. In 'limited' wars obviously only the older weapons will be used.'

LORD CROFT said that failure to announce the broad lines of post-war policy was having an adverse effect, causing unnecessary expenditure, and throwing a burden upon taxpayers. It was causing inefficiency in the preparations of the Services for the future, and was causing hardship to officers and N.C.Os desirous of remaining in the Forces. When the German war ended there were already exhaustive preparations in the Services which would help in planning the size of the separate force. Yet though the war had ended no pronouncement had been made concerning any Cabinet decision on policy. Each Service was suffering from complete uncertainty, and it was, he felt, having a deplorable effect.

"Until decisions are made there will be unnecessary waste of public funds running into millions of pounds each month. What are our requirements of ammunition? Unless you decide on the size and character of the Forces, how can those responsible for planning say what equipment and ammunition are required? How can they estimate storage requirements, barrack accommodation, etc.? If you do not decide, for instance, whether you will require x armoured divisions or x armoured divisions plus 2, you cannot possibly abandon any tank training areas. The same is true of ships and docks and other naval installations, and of aircraft and aerodromes. Until you know the layout and the location of your Army how can you tell just what training areas are required in the Middle East, the Far East, or in Britain?

"Twice have we gambled on surviving the first round of the fight. The third time might be fatal. We all hope there will not be another serious war, but hope is not enough. We cannot again take the risk of unilateral disarmament. America appears convinced that it must maintain great Forces on sea, land and in the air. Why cannot we too make up our minds?

"As to the human factor, in all three Services are large numbers of officers and N.C.Os who have excelled as leaders and whose retention in the Services may make all the difference to the efficiency of the Forces when they are reconstructed. Imagine the situation of these officers and men, whose demobilisation is about to take place. They see their brother officers getting the best jobs in civil life. Are they to gamble by continuing in the Service for one year, which may leave them worse off in the end?"

Lord Mottistone said that General Arnold, of the American Army, had made a somewhat novel suggestion in regard to future defence forces. His suggestion was that it was necessary to have, first of all, twenty-five installations, each one of which could destroy a capital city, spaced over the world in countries in which the United States now had control. After that, suggested General Arnold, a huge Secret Service would be needed, running into many millions of people, in order to find out if the other fellow was doing something of the same kind. Lord Mottistone added: "If it needed only twenty-five of these installations to destroy most of the world, it is obvious that you will need a very vigilant force to watch what the other man is doing." Thirdly, General Arnold pointed out that a great force would be needed to go to the place where, through Secret service methods, it had been ascertained that the other fellow was working mischief, and quickly stop it before he had completed his arrangements. That was what General Arnold had submitted to the American people.

"The atomic bomb, it is said, would probably result in bringing to an end all life on earth. To avoid it, what can we do? We can have a great force which could stop the machinations of war-minded countries. Where would that lead us? It would lead us straight to the fact that you cannot abandon all the means of enforcing your will on your neighbour. You must maintain a nucleus of armed force, but from the point of view of the people of Britain the sky is the limit of what you want in man-power.

"You want every single male to be taught, as soon as he is capable of learning it, that he can only live through ceaseless vigilance and through being ready in body and mind not only to serve his country, but to serve the cause of mankind as a whole. I therefore support Lord Trenchard in his plea that the youth of the country be taught the necessity of doing everything to maintain health in body and mind, and that there should be, if conscription on the continental model is not thought to be desirable, a great school of morals and social virtue and, above all, of self-sacrifice. Our people should be prepared to join with America and Russia in stopping an extermination policy which, if unchecked will, without a doubt, destroy mankind."

Lord Tweedsmuir, who has served as an officer in the Canadian Army for the past six years, said: "Canada's problem is simpler—a much smaller number is involved. The Canadian Government has promised to publish the terms and conditions of service of her peacetime Army on, or before, March 31, 1946. Meanwhile, to provide personnel for her peacetime Army and replacement for her forces in Germany, she has what is called an Interim Force. Any officer or man who wishes to join the Regular Army joins the Interim Force and, if accepted, serves in it under the same conditions of pay and allowances and conditions generally, as obtained during the war. When March 31 arrives the terms of service will be announced, as the Interim Force ceases to exist, and these officers or men will be taken straight into Canada's peace-time Army. Thus those who, when their conditions of service are declared, find that they do not care for them, have the option of withdrawing without further obligation."

LORD CHATFIELD, referring to the Combined Staff College advocated by Lord Trenchard, said the comradeship and unity of the Services were of first importance to-day. "We have got to get the Services as united in peace as they were in war. But 'united' does not necessarily mean 'uniformity'. If you are going to have any body united you want the separate element of that body to be as efficient in themselves as possible. Each Service must have its own special efficiency; it

must have its own means of entering its personnel and providing for their early training. Each Service must have the ability, however, to combine together.

"That unity must not only be among the lower ranks; it must also be at the top; and if you want unity at the top you have to remove the causes which have prevented that unity in the past. What were they? The Services were made to fight each other for the money to develop their own arms. Take Singapore: as a naval base its proper defence was of vital importance to the Navy, and each of the three arms could only primarily be effective in a certain way; no one arm could do all that was required to defend Singapore. But the discussion unfortunately was forced into a violent controversy between the Services as to whether they should have guns or aircraft. Can you imagine Imperial Defence being conducted efficiently in such a manner?

"I hope the Government will create another Minister for Co-Ordination of Defence who will have under him a Council, such as we created in 1939, of the three Service Ministers, the Chiefs of Staff and the Foreign Secretary to deal with all the problems of defence and to bring the three Services together and argue out their points with each other.

"Service Estimates should be combined. The position should not arise where each Service, in its own building and unknown to the others, asks for so much money to do so much. All are part of a team. Service Estimates must be discussed together and fought together. The three Chiefs of Staff and their Ministers must go arm in arm to Parliament, in such way as they are constitutionally able to do, to explain that it is one Defence Estimate representing all the requirements of the three Services."

Replying for the Government Lord Stansgate, Secretary of State for Air, said that all the questions raised in the debate had been under the consideration of expert bodies for many months. To bring out a schedule of pay and conditions of service for the three Services was a formidable task; the matter was not merely under active consideration, but was being worked on day by day most industriously.

There was no intention of integrating the three Services; it was not the time for things of that kind, nor at the lowest levels was it useful to bring the airman, soldier and sailor together. On Staff College level they had colleges at Bracknell and Bulstrode Park; there was a School of Air Support at Old Sarum run by a Combined Staff of Navy, Army and Air Force; there was also a Central Fighter Establishment with Army and Naval officers on the spot. The Staff Colleges have combined exercises but they were not together. As to the Imperial Defence College, he was glad to announce that it would be opened next year, and that Sir Hugh Lloyd would be the R.A.F. Instructor there.*

"It is a troubled world. You can hardly find a map in the atlas where there is a spot without potential trouble. We do not yet know what part we are to play in the U.N.O. It will be a great thing when we are all invited to take part in this world organisation."

^{*} General Sir William Slim has since been appointed Commandant.

AIR PHOTOGRAPHY IN POST-WAR INDIA

By Wing Commander C. E. Daniel and Flight Officer R. Langhorne W.A.A.F.

REW techniques of the craft of war have developed in such a remarkable way between the two world wars and during the five years of the second world war as has the technique of air photography. During 1914-1918 air photography was used in a limited way only, and then mainly for tactical purposes: the short range of aircraft and the standards of aerial photography then existing made impossible a wider role. By 1939, however, the developments in photography and in the performance of aircraft, and the large numbers of aircraft built, permitted extensive and continual photographic reconnaissance of areas hundreds of miles behind the enemy's lines.

By 1945 hardly a day passed in which dozens of photographic sorties were not flown, thousands of photographs taken and hundreds of interpretation reports issued; and by that late stage in the war large and complex organisations had been built up in all theatres to take photographs, print and reproduce them in bulk, and issue interpretations of them in written and graphic form. A brief account of the nature and function of air photographs in war has already been given in a previous issue of this Journal.*

The value and importance of air photographs to the civil and military departments of government does not cease with the end of hostilities. In peacetime air photography will have a dual role to play—the first military and the other civil. After the war the military role of air photographs will naturally not be concerned in the main with actual operations, although in India operations on the north-west frontier will still require the support of aerial photography.

The postwar military role of air photographs will be concerned mainly with the planning of future operations and with training. The General and Air Staffs will require air photographs in their strategic deliberations and in their detailed planning of airfields and fixed defences. Moreover, all extensive exercises, schemes and manoeuvres will require air photographs used in the same way as they were during the war-for briefing patrols, to supplement or replace maps, and for the guidance and information of staffs in their plans.

Staff Colleges, Tactical Schools, Intelligence Schools, Military Academies as well as schools of specialist branches will have to include instruction in air photography in their post-war courses, and such instruction should have two separate and complementary aims—to make all officers competent air photoreaders, and to make them all realise fully the potentialities and limitations of air photography and the role of this technique in war.

As in war it is not possible or desirable to make all officers expert photographic interpreters, nevertheless it should be the aim to make every officer as competent in "reading" air photographs as he is in reading maps. Those who showed special aptitude in photoreading could receive additional training in specialist aspects of interpretation and their names kept on a list for future selection as divisional and corps interpreters in the event of a future war.

The non-military uses of air photographs in peacetime are legion: here we may divide them roughly into four groups: survey, town and country

account of the use of air photographs between the two wars.

^{*}G.E. Daniel, "Air Photographs and Interpretation in War". Journal of the United Service Institution of India, LXXXIII, July, 1943 pp. 307 ff.
†C. Winchester and F.L. Wills, Aerial Photography, London 1928 gives a useful

planning, archaeological and historical, and educational. The uses of air photography in survey are obvious: air photographs enable large scale surveys to be made of unmapped regions more quickly and more cheaply than by ground methods, and they permit of easy revision of existing maps. The air photograph, moreover, gives a more complete picture of the country than do the best maps, providing changing detail such as crops and hedgerows as well as the more lasting features of the earth's surface, such as towns, railways and houses which are recorded on maps.

Air photographs are most useful for specialist surveys such as those undertaken for geological, geographical, land utilisation, crop assessment or forestry purposes. Aerial surveys should be undertaken of areas where soil conservation and the checking of erosion is required: these are particularly important problems in eastern Asia, where long dry spells are followed by heavy rain.

In countries such as Burma and Siam there is a large amount of sporadic shifting cultivation by hill tribes, and this is practically impossible to check at present, except over long periods, owing to the wild nature of the country in which it is practised. As these clearings are only used for one or two years this is a most wasteful form of agriculture and leads to serious erosion in many cases: an annual check by air photography would enable appropriate action to be taken.

Surveys by air photographs of floods would reveal immediately the extent of floods, and the direction of movement so that counter-measures could be immediately instituted.

It is not only by means of the more formal mapping surveys that air photography can render valuable assistance to civil departments. Speedy demarcation of forest areas damaged by fires would enable a rough assessment of damage to be made quickly. Similarly damage by cyclones and storms could be quickly assessed and also rapid estimates of crops prepared. An assessment of the rice crop in Bengal during the autumn of 1942 from air photographs would have been of great value to civil departments concerned in planning measures to avert the famine which eventually occurred.

Air photo surveys of forests are not only more accurate and more quickly and more cheaply done than ground surveys, but they are more detailed and provide information unobtainable from ground surveys, such as exact demarcations of sandy waste, grass, scrub, types of forest, etc., or accurate estimates of the quality of forests in general or the extent and manner in which forests are being worked. The forests of the Irrawaddy Delta, covering an area of over one thousand square miles, were surveyed and mapped from air photographs in 1924, and according to Sir Peter Clutterbuck this was done "at about one half the cost and in about one sixth the time that would have been required for a land survey by ordinary methods"; a total of £19,000 was saved by using air photographs on this survey. Air photographs provide an excellent basis for stockmapping inaccessible areas of forest and for making working forest plans.

During the war air photographs were extensively used by the Scrub Typhus Research Laboratory. The maximum incidence of scrub typhus appeared to be associated with grassy secondary jungle which has been overrun by small mammals, especially rodents. The Laboratory studied the features of such vegetation in South East Asia, and the importance of different vegetation types in juxtaposition, on air photographs. Field surveys were also planned from air photographs.

The work of this laboratory suggests that air photographs may be used extensively in the future even for medical and public health surveys.

No less than for survey purposes will air photographs be of great value for town and country planning after the war. In planning industrial and municipal developments, electrical schemes, factories and works, traffic control, railways, river conservancy, the layout of cities and holiday resorts, housing developments of all kinds—in fact in the whole framework of town and country planning air photographs are now a pre-eminent prerequisite of efficient and accurate work.

But the modern problems of survey and development-important though they be-do not absorb all the constructive energies of a state. Indeed, it is only a bastard nation that can afford to neglect its own past. Here again, in the study of a nations' past, air photographs are of great value. The archaeologist in his painstaking and difficult task of piecing together the material remains of the past into the jigsaw picture of history, uses air photography a great deal. In the first place it provides him with a bird's-eye view of sites such as is unobtainable in any other way, and gives him a greater unity of vision than ever before: he is able to see a fort or a city or an old village as a whole and in relation to the surrounding countryside. But in the second place air photographs show to the archaeologist features which he cannot distinguish or distinguish only with the very greatest of difficulty, on the ground. It is often a matter of amazement to non-archaeologists that air photographs can reveal to the trained archaeological interpreter features of buried or partly destroyed cities and houses, villages and tombs of which there is no longer any visible trace on the ground.

The archaeological interpretation of air photographs started in the early 1920s, when an archaeologist studying photographs taken during training over Salisbury Plain noticed a pattern of lines and blobs showing up in ploughed fields and having no relation to the modern features of the countryside: most recognisable was a chessboard pattern of small irregular rectangular areas which were in fact the forgotten boundaries of pre-Roman fields. From these beginnings the technique of archaeological interpretation was developed and it was possible to plan fields, villages, houses, storage pits, tombs and temples which lay hidden beneath the growing crops and flat fields of England. The most spectacular discovery was perhaps that of Woodhenge—a kind of wooden prototype of Stonehenge, which was revealed by air photography and of whose previous existence no one had any knowledge whatsoever.

The secret to the apparent mystery of archaeological air photography lies in three things: shadow, soilmarkings, and cropping. The low sun of early morning or late evening by throwing exaggerated shadows of great length, shows up the very faint traces of earthworks on open heathland or downland which time has made almost invisible with a noonday sun. In a compact soil like gravel or chalk, when once a hole or trench is dug, it never fills in with such firm hard soil as the untouched ground—it is always looser, and contains a deeper layer of humus than the rest of the surrounding untouched ground: therefore crops grow more luxuriantly and usually taller than on the undisturbed ground. Conversely, buried stone walls, foundations of houses and roads with their stony subsoil stunt the growth of crops above them. The luxuriant cropping shows up as a difference of growth and colour made manifest on ordinary air photographs as a darker tone, whereas the poorer cropping shows up as a lighter tone against

the general background of a field. From these tonal differences the details of buildings and sites can be easily made out.

In the British Isles and other parts of Europe the technique of archaeological air photography was developed a great deal in between the two world ward. Experiments had even been made with submarine aerial photography: among the first of these published were those of the stone walls of ancient field systems now below the shallow sea in the Sicily Isles. The subcontinent of India has wast potentialities for archaeological survey, but hitherto little of this specialist aerial photography has been undertaken.

The uses of air photographs in education are many. They enable the face of the world with all its many and varied natural and human features to be presented clearly in the classroom, and teach the student a new view of the world—a wide bird's-eye view—which he can obtain in no other way and which adds greatly to his perspective of geography.

In peace as in war, the many and manifold advantages and benefits of air photography can only be obtained if an efficient and centralised organisation exists to deal with the problems of photography and photo-storage. In the first place there must be a centralised library of aerial films and prints, and this library must be thoroughly well organised with a system of cover traces and index cards so that users of the library can find the photographs they require with ease and rapidity, and rapid checks can be made of areas asked to be photographed to ensure that such photographs do not already exist and to prevent unnecessary duplication.

All organisations using air photographs—the General Staff, planners of Airfields, Survey, Geological Surveys, and Civil Departments will all tend to ask for a complete library of air photographs for themselves, just as in war all concerned branches wanted complete print libraries, but the answer in peace as in war is that efficiency and considerations of finance make this impossible and the maintenance of a single central print and film library imperative.

Secondly, there must be a small secretariat at Central Government or Air Headquarters level to receive demands for fresh photography and arrange for these to be carried out, if approved, through service or commercial channels. This secretariat is essential to avoid duplication of requests and photography: it would control the central film and print library and refer all demands for photography to that library in the first instance, to ensure that adequate photographs did not already exist to satisfy the demands, which would then be demands for reprints rather than for fresh photography. It would be best for this secretariat to be in close contact with and under the direction of the Director of Intelligence (India), so that the security problems involved would be properly dealt with, and so that, for example, photographs of defended areas and secret sites were made available only to accredited persons and departments.

Thirdly, a technical section alongside the library is required to carry out demands for reprints, and where required to issue the photographs made up into special forms, such as mosaics or rough plans; or issued with special annotations or even built up into three-dimensional models. The use of three-dimensional models made from air photographs was very widespread during the war in the planning and briefing of military operations. Such models would be of great value in planning strategic schemes after the war, as well as in planning and organising military exercises and tactical schemes. Furthermore, such models could be of equally great value to civilian organisations planning railway schemes or hydro-electric schemes or reorganising the layout of cities.

NEPAL HONOURS INDIA'S C. IN. C.

BY CAPTAIN R. A. DONALDSON.

A LL the world knows Johnny Gurkha, the staunch little fighting man who has distinguished himself in two world wars, but few know anything of the independent mountain kingdom of Nepal from which he comes. Sandwiched between the vast sub-continent of India and the great snow-capped range of the Himalayas, it is a closed country to all but those invited by the Nepalese authorities, and they are few.

Because of its seclusion an atmosphere of mystery has been built up around the country, this atmosphere being thickened from time to time by books which are published about it. The tendency is to over-write, to play on the country's sequestration and certain minor aspects of its culture. In this Americans are the worst offenders. They have written books in the worst taste. They have over-painted and dramatised. They have at times been almost vindictively offensive.

It is, of course, easy to fall victim to this sort of thing. There are certain facets of the country and its life which are distinctly unusual and far removed from anything seen in other parts of the world. To build up on these and thicken the aura of mystery is simple and, to the unscrupulous, there is little risk of being caught out.

But to the visitor who goes to Nepal with his mind unhampered by the imaginative creations of earlier travellers two facts stand out. That part of the country through which the road to Katmandu passes is normal. It is, moreover, extremely rich and well-cultivated by people who are vigorous, merry and independent. And the cities of the Valley of Nepal, which is the heart of the country, are lovely, unusual and bewildering with a medley of architectural styles expressed in hundreds of Hindu and Buddhist temples and shrines.

It is strange, it is colourful, it is fascinating. They were my impressions after a fortnight's stay in Katmandu during which I was given every facility to tour the length and breadth of the Valley of Nepal. For the rest of the country I cannot speak, for it is closed to all Europeans. There appears to be no mystery about that. In a uniquely isolated position, Nepal prefers to keep to itself. And why shouldn't it?

The purpose of my visit was twofold. I went in as an Indian Army Observer (which is a clumsy official title for an army reporter) to describe the return of the last of the Nepalese Contingent to their homeland, and to attempt to report the glittering scenes of the Durbars held for the investiture with the Most Refulgent Order of the Star of Nepal of the Commander-in-Chief in India, General Sir Claude Auchinleck.

Blood brothers of the Gurkhas who enhance the reputation of the Indian Army, the men of the Nepalese Contingent were drawn from Nepal's own army and were offered in the service of Britain immediately after the outbreak of war. It was a positive token of the long-standing friendship which has existed between the two countries since the war between them ended in 1816. It was a gesture which had a precedent in the first world war and, if you care to go as far back in history, in the Indian Mutiny of 1857.

Some of the nine regiments forming the contingent—numbering about 10,000 men in all and officered by Nepalis—helped Britain on those two earlier occasions. All have served with distinction in this war, either in Burma or on the North West Frontier. They proved themselves Johnny Gurkha's equal, and that says a great deal.

I went into Nepal with the Bhairab Nath, the last of these regiments to return to its homeland. To do so I travelled with them across the north of India to Raxaul, the little railhead on the India-Nepal border. All the way they cheered and jested as men do when home lies before them, and at Raxaul they piled out to camp the night at Birganj, two miles to the north and just inside their own land.

The journey to Katmandu must surely be the most difficult approach to any capital in the world. Hemming in the country along its southern boundary with India lies the Terai, a belt of thick matted jungle which, with the great ramparts of the Himalayas to the north, sequesters the country from the outside world. This jungle holds the finest big game—tiger, elephant and rhino—in the whole of Asia, as well as a dreaded malaria fever of great severity.

Through the Terai north from Birganj a little $2\frac{1}{2}$ ft. gauge railway fusses for 22 miles to Amlekganj; from there a motorable road covers the 27 miles to Bhimphedi. That is the end of modern transport methods until the Valley of Nepal is reached. For more than 20 miles, crossing two great mountain ranges, only a hard, arduous track winds. It is a track which climbs and falls, clinging to mountain sides and often edged with sheer falls for hundreds of feet. It crosses (by modern girder and suspension bridges) some of the loveliest rivers in the world. It tests the fortitude of men and sure-footed Tibetan hill ponies, for only these can negotiate it.

It is a heroes' track, too, for over it have marched many Gurkha winners of the Victoria Cross, ten in this war. And over it Katmandu's cars and trucks have to be carried, each by more than a hundred porters who sweat and toil under their colossal burdens for about a week before the valley holding the capital is reached.

Yet the road from Amlekganj and the mountain track from Bhimphedi pass through a smiling land of apparent plenty. All the valleys hold well-cultivated soil heavy with paddy and mustard. From these patterned floors terraced cultivation is carried up to the timber line on the great forest-clad hills which enclose them. Corn cobs in great bunches or stacked around the boles of trees out of reach of cattle, grain drying on rush mats before cottages, handsome cattle and sturdy people speak of the happiness of this land.

The Nepalis with whom I had crossed India took this hard road in their stride. At a small village not far from the foot of the almost sheer mountains holding the Chandragiri Pass—that cleft from which one gets a first surprise view of the Valley of Nepal—while resting my pony I watched a company of them swing around corner with a gay song at their lips. It makes the journey sound easy, which it is not. They were merely strong-limbed hill men going home.

The Chandragiri Pass stands nearly 8,000 ft. above sea level, and to reach it the climb is over a boulder-strewn path in leech-infested and dank forest. But you forget all that in the little nick in the ridge from which you look down on the valley. It is like a Shangri-la or something from Butler's "Erewhon." The snow-clad, serrated range of the Himalayas makes a fantastically beautiful back cloth. Before it, dark brown timber-covered foothills undulate down to the valley and enclose it in a friendly sheltering hold. The level floor is carpeted with

the curiously checkered design which fields of ripe paddy make. Away to the east lay Katmandu like a dull gem in a bright setting.

• At Thankot, nearly 3,000 feet below, I left our Nepalis but I saw them again next day when they made a triumphal entry into the lovely old city of Katmandu. Near the Durbar Square at its heart, holding an amazing variety of temples and shrines, most of them tiered in pagoda style, the Prime Minister, Maharaja Sir Joodha Shumshere Jung Bahadur Rana, from an elephant took the salute as the last of his Contingent marched by.

Soon after, on the Thuni Khel—a vast maidan of bright green grass which is said to be the finest in the world and certainly looks it—the Bhairab Nath Regiment's commander made his formal obeisance to the Prime Minister, and the officers made token offerings of money to him in accordance with the custom of the country. A brave little army was home.

A few days later I watched another triumphal entry. Travelling over the same hard way which is the only way to Katmandu, General Auchinleck arrived at the city boundary and from there drove in a state coach through vast crowds of Nepalis to the British Legation which stands on the northern skirts of the city.

His visit was twofold. He had come to be honoured by a warrior kingdom as a great soldier and friend of the Gurkhas and to express to Nepal the thanks of Britain and the Allies for her great contribution to victory in first-class fighting men and material. For it must be remembered that 100,000 men from Nepal to-day make up the Indian Army's Gurkha regiments, while her contingnt numbered no fewer than 10,000. It was a handsome contribution from the mountain kingdom.

Although the population of Nepal is almost exclusively agricultural the country is ruled by a Court of great elegance. It is a Court modelled on European lines but with a brilliance and glitter which must be unequalled in the world. Few people know anything of the splendid pageantry of the Court of Nepal; in fact, it is doubtful whether it has ever been described.

General Auchinleck's investiture, in one respect, was unique. He was not the first Commander-in-Chief in India to be honoured in this way by the Nepalese people. Roberts, Kitchener, Chetwode and Birdwood had preceded him. But he was the first non-Nepalese subject to be personally decorated by His Majesty the King of Nepal, Maharajadhiraja Tribhubana Bir Vikrama Sah, whose public appearances are extremely rare.

The three days of State ceremonial which made a complete and bright section in the tapestry of Nepal's history began with a formal call by the Prime Minister at the British Legation on the morning after General Auchinleck's arrival. "I welcome you to my country," and a handshake. It sounds formal enough, but in fact the picture was like that of two old friends meeting.

In the reception room at the British Legation the Commander-in-Chief was introduced by the Prime Minister to the men in whose hands lies the future of Nepal: those in the line of succession to the Premiership. Unlike the King's succession, which is from father to eldest son, that for the Prime Minister is lateral, working out through the line in one generation before descending to the next.

The formal courtesies ended with the exchange of attar and pan, an old hospitable custom of the country which marked the conclusion of all these ceremonial occasions.

The King's Durbar Hall in Katmandu is a lofty room designed in European style. Its lightness and grace in decoration are enhanced by strong sunlight pouring through high windows which almost fill one long wall. Opposite, the wall panels are filled with full length portraits of famous Kings and Prime Ministers of the country. Conspicuous among them, and expressing the old friendship between Nepal and Britain, is a portrait of the young Queen Victoria presented in 1850 to the great Prime Minister, Jung Bahadur, on his visit to Britain. Nearby is a portrait of King George V who, after the Delhi Durbar in 1911, was the guest

at a famous big game shoot in the Terai.

Into this beautiful hall, from the ceiling of which depend eight magnificent crystal chandeliers, His Majesty the King was handed by the Prime Minister. Both were conspicuous in a brilliant assembly uniformed in European style full dress of scarlet tunics and tight-fitting dark blue or bottle green trousers. Their orders and decorations gleamed in the sunlight. They were conspicuous for the magnificent jewelled helmets of priceless value which they wore. Made up of caps closely sown with pearls and heavily encrusted with diamonds, emeralds and rubies, there rose from the front of them great bird of paradise plumes which swept above their heads and fell low over their shoulders. Almost all the other members of the leading families present wore similar helmets, their status being indicated by the measure of jewels they carried.

To this scintillating scene Gen. Auchinleck drove in a state coach, from which he was led to the King's heavy silver and gold throne by the Nepalese Commander-in-Chief, General Sir Padma Shumshere Jung Bahadur Rana, and the Senior Commanding General, Sir Mohan Shumshere Jung Bahadur Rana. In the full dress of a British general, his scarlet tunic was covered with the orders and decorations won in a long and distinguished career with the Indian Army. He was as fine and soldierly a figure as one could see anywhere; certainly I can think of none to look more impressive. Standing hatless and alone while a citation paying tribute to his prowess as a soldier and a friend of the Gurkhas was read he then received from the King the insignia of the Order of Star of Nepal.

In a scene so formal and regal in its splendour a slight personal point might seem unworthy of recording. Yet when General Auchinleck, acknowledging the honour that had been done him, said of the Gurkhas, "I give place to no-one in my admiration and affection for these gallant sons of Nepal, than whom there are no braver or tougher soldiers in the world to-day," a broad smile flashed across the face of the Prime Minister, a smile which was reflected among most of the distinguished assembly in the hall. It seemed a measure of the sincerity of

the occasion.

Also invested by the King with the most Refulgent Order of the Star of Nepal (Second Class) was Major-General J. G. Bruce, Deputy Chief of the General

Staff, and member of several Mount Everest expeditions from Nepal.

If the scene at the King's Durbar was reminiscent of a European salon, that of the Prime Minister next morning was more demonstrative of the art and nature of Nepal. The Durbar Hall is supported by four rows of eight silver-covered columns whose capitals are made up of garujas, those mythical creatures frequently seen in Nepal. Soft indirect lighting flows down from an elaborately moulded and richly decorated ceiling. Into this setting the present Prime Minister has concentrated exquisite examples of the arts and crafts of the Newars, the original inhabitants of the valley, who are famous for their woodcarving and metal work. Glowing with strong sunlight showing through the deeply carved double entrance doors, two silver and gold thrones of great beauty showed under a heavy crimson canopy.

Into this darkly rich scene the same brilliant assembly as for the King's Durbar was gathered and into it General Auchinleck was received by the Prime Minister. Formal courtesies were exchanged, and then the man who conducts Nepal's affairs so wisely expressed his country's thanks to General Auchinleck and, as a continuation of the previous day's ceremony, presented to him the yellow plumed helmet and gold scabbarded sword of a general of the Nepalese Army. They were the symbols of a country's friendship and affection for a great soldier.

Nepal is a kingdom of warriors and next day on Katmandu's wide-stretching parade ground, with the high mountains as a superb background, she showed her military might. Twenty-five thousand troops of Nepal's army were drawn up there. Rather more than half were in the scarlet and blue full dress uniform of her home army. The remainder were in the khaki which has been the Nepalese Contingent's service dress in Burma and on the North West Frontier.

Along their cheering ranks General Auchinleck drove, and then for two hours he took the salute as the vast parade marched past in columns of platoons. Their drill was perfect. They would have done credit to a Guards regiment. It was the same when they advanced in review order—that most difficult of ceremonial drills—to hear General Auchinleck's congratulations. It was perhaps the greatest military pageant that Nepal had ever staged. It was certainly an unforgettable sight.

On a smaller scale, but equally impressive, was the Nepalese Contingent's own victory parade staged while General Auchinleck was making his arduous return journey to India over the mountain tops. The order was the same but after the Prime Minister had taken the salute high-ranking officers gathered around the King under the old tree which stands in the centre of the parade ground. Under it much of Nepal's earlier history was enacted. There, they and the men heard a speech by the Prime Minister outlining Nepal's war effort and praising the part of her fighting men.

That night Katmandu was lit up as for the colourful festival of Diwali. From the parade ground hundreds of multi-coloured rockets stabbed into the black night and huge set pieces of fireworks knew their brief glory. And in the old city thousands upon thousands of little oil cruses with their yellow lights picked out the lines of the buildings. Humble homes and the hundreds of temples and shrines which make Katmandu one of the loveliest cities in the world, all were headed with lights.

There remained one other ceremony to complete the country's week of state pageantry. In the Prime Minister's huge white palace twelve British officers who had served as advisers with the regiments of the Nepalese Contingent, and three Indian medical officers who were with battalions in the grim fighting in Burma, received Nepalese awards. It was the first time in the history of Nepal that Indians had been decorated.

There could have been no fitter recognition of good service. During the march past before General Auchinleck these men had stood as their regiments went by, and not a few of them turned away with tears in their eyes. The Gurkhas are like that. Their honesty, independence, good humour and fine fighting qualities endear them to their leaders.

During this "British invasion" of Katmandu the normal British population of eight had been swollen to thirty. Never before in the history of Nepal had so many Europeans been in the country at the same time and never before had so much of the country's picturesque ceremonial been concentrated into such a brief period.

THE RE-BIRTH OF A REGIMENT

By "Madrassi."

FOR a year I have served with a Madrassi battalion. I went to it very unwillingly, wondering what "they" had up against me to warrant such an assignment. My friends commiserated with me, and my wife was appalled but revived later when she remembered "I'd have good cooks and bearers." I, therefore, boarded the rail car at Simla in much the same frame of mind as a convict must board the ship for Devils Island. I felt an outcast from the Army.

Now, after a year with them, I can wish for no better fate in this changing Army world than to stay on with the Madrassis in the post-war Army. There must be reasons for this radical change of face, and there must be reasons for the commiseration of my friends. To try and elucidate both this short article is written.

First let me deal with my friends. There are still many I.A. officers prejudiced against "those Madrassis" and firmly convinced they will never make soldiers worthy of the best I.A. traditions. When asked why, they usually reply that "the Madras Battalions were disbanded after the last war as just no good, and so there can be no argument about it." I submit that there is. Such people speak without knowledge gained from service with the Madrassi; they are merely carrying on prejudices strongly ingrained into the I.A. from about 1900 onwards. Anything that did not come out of the Punjab or thereabouts was no good as a soldier. This attitude had its equivalent in the disdain with which everyone in those days viewed the unfortunate person who dared to point out the importance of the N.E. Frontier and its jungle to Army training.

Some say that the strangle knot was finally tightened on the Madras Battalions after the last war by purposely posting to them indifferent officers who naturally produced indifferent results. If that was true, it must have been initiated by someone who knew his business, because there is no better or more subtle way of discrediting a Regiment.

The Madrassi was looked down upon by the rest of the Army. He lost his morale and faded away from the Army that did not want him. Against this background of distrust and disdain the Madras Regiment was re-born a few years ago—mainly, I understand, through the determination of our present Commander-in-Chief. But there are still some senior officers, I am convinced, who feel certain that the Madrassi will never make an infantry soldier. They can never have served with them.

The Madrassi has many and weighty military assets over the pre-war "martial races" of Sikhs, Rajputs, P.Ms., etc. He is almost entirely free from those hateful petty intrigues which so often simmer away in the older I.A. battalions. The outlook and behaviour of the Madrassi soldier is very akin to that of the British soldier. If he gets a square deal he rarely gives trouble. On parade he does his job well and thoroughly, and is amenable to strict discipline. Off parade he asks for a loose rein, a good and cheery canteen, and a few hours of relaxation with something in his pocket to spend.

In time the discipline of parade seeps through into his life off parade, and there you have your Tommy. He appreciates and reacts well to good management—good food—a good canteen—good rum and an occasional jolly

in the lines. Give him these and you can work him as hard as you like and as long as you like and he'll finish up smiling. And a Madrassis really smiles—he doesn't just smirk.

He has guts, and war guts, too. The Regiment had only three Battalions ready enough for Burma by the end of the war; but all have done well and got good chits, and their very fair share of decorations. You can watch them at soccer and hockey—there is no shying off the ball. You can watch them on tough route marches. You always get the same answer—they've got guts. Their capacity for hard work is greater than that of the pre-war sepoy. Silent work, however, is hateful to them. If you hear chatter like that of a hundred magpies, you know a hundred Madrassis are working hard. If they are quiet, there is something wrong. It's the main snag in their jungle training.

Communal differences are unknown. All that uncomfortable suspicion indicated in the order "There will be mixed guards" is absent. The sweeper eats with the sepoy, and the Mohammadan is quite often ready for his tot of rum. All this will probably make the old stagers snort and refer to them as beings of a lower caste. They do not realise that Madrassis are as different from races of Northern India as the British soldier is from the Sikh.

The Madrassi is quite amenable to discipline. But it must be strict, and nothing must be allowed to slide. If a fault is allowed to pass by, he is intelligent enough to be very quick off the mark in exploiting it. He will go off the rails like any other normal being, but is usually willing to pay the price. At Summary Courts Martial I have held it is exceptional for the culprit to plead "not guilty". He realises he has been caught out, and he takes the rap. If he argues the case it is a fair indication that he's not had a square deal somewhere.

It is essential at this stage of its resurrection that good officers be posted to the Regiment. The same applies to all Regiments made up of entirely young soldiers from the Subedar Major downwards. The average of service of V.C.Os in our Battalion is four to five years—and the Subedar Major has six years! They will grow up on the example shown them by their officers. The Madrassi is extremely quick to spot things good and bad. A slack B.O. of the "sign blind" type thinks things are going well until some little hitch occurs, and then investigation finds his company in an appalling state under the surface.

If the Madrassi realises his officer gives orders which he means to be obeyed, he—the Madrassi—will produce the goods every time. A young Battalion is like a pup—it will steal until it is taught not to do so, and a slack master will never teach it. Madrassi E.C.Os. I have had are, on the average, a stroke ahead of the normal Indian E.C.O. They are good mixers in the Mess and do not take offence quickly. They are good at managing their own men, from whom they stand no nonsense.

The average sepoy understands little, if any, Urdu, and does not take kindly to learning it. His inclination and background is more towards English. Tamil has many more English words in it than has Army Urdu. It is essential, of course, for the British Officer to learn the men's native tongue if the best results are to be obtained.

Madrassis are clannish and do not mix well with other races of India. They do not like service on the N.-W. Frontier—not because of the toughish life, but because of the extremes of climate and distance from their homes. Everyone volunteered for drafts to Battalions in Burma, but there was an ominous silence when Battalions on the Frontier were mentioned. This may possibly have

been the cause of the old Madras Battalions falling into disfavour in the days when the Red Flag of the rearguard was the be-all and end-all of I. A. training. The Madras Sappers and Miners have always done extremely well on the Frontier, however, and there is no doubt that as the Madras Regiment grows older it will also acclimatise itself to that part of India. But the Madrassi will always be more at home in the bamboo jungle—he is more in his element there than when shining up a snow-covered hill on the Frontier. That is not a bad asset for the I.A. of the future, when one hopes that the antique training for war as visualised in the "Manual of Frontier Warfare" will be relegated to its proper perspective. The very word "Manual" dates it.

Maybe some readers will declare that all this is "hot air" from a Madrassi officer out to bolster up his Regiment. It is not. It is the experience of an I.A. officer who went very grudgingly to a Madras Battalion and who has always been on the watch to justify his original opinion of their soldierly value. The Madrassi has his faults, of course. He is apt to be slack over his turn-out away from the unit. He likes bazaars, and especially its feminine lures. He does not think twice about overstaying his leave, and will consider selling his clothing towards the end of the month for money for the canteen.

In some ways his quickness in the uptake is a liability. One has to be extremely careful. I was astounded one day to find the Subedar Major telling me he had "buttoned up" a certain N.C.O. He had heard me use the expression when talking to B.Os, and had promptly hatched it. But imagine a S.M. with 30 years service, from Chakwal if you like, using such a phrase to his C.O.! That's the difference.

The Madras "child" wants bringing up with a broad, open and patient outlook. It has no use for those diehards still assessing military values on "speed in the withdrawal."

WHAT THE ATOM BOMB LOOKED LIKE

Here are the impressions of Group Captain Cheshire, V.C., D.S.O., who watched the effect of the dropping of the atomic bomb on Nagasaki from an aeroplane 20 miles away. Speaking at a public meeting in Manchester, he said:

"Words cannot describe what happened. Other people who saw the explosion described it as boiling, as turbulent, as seething. It can also be described as something like a large piece of felt that has been compressed and then suddenly released—expanding, unwrapping, unrolling.

"Underneath it, between it and the ground, was a column of smoke. It was like a ping-pong ball on top of water, and at the base of that column of smoke was a hard apex of black smoke. All the time you could see the very dust from the ground being sucked up into the air, even at twenty miles' distance you could see the uprising of dust and dirt as it was all sucked up from the ground by the heat of the explosion.

"This spectacle went on for some two or three minutes until eventually the cloud got up to a height of 60,000 feet. By that time it was probably two miles in diameter and at 60,000 ft. it stayed.

"When you got close to it you could see a sort of evil kind of luminous quality to it. It was not white but rather like sulphur. We knew that any aeroplane that flew into it would be destroyed—but we had no need to be told; you could see it. There was something about it that spelt evil, and it will stay in everybody's minds who saw it."

SALUTING

By "JAMES FRANCIS".

A FRIEND of mine, a senior officer, was walking along the main street of a large military station in South India, when he was passed by a Brigadier driving in a jeep. He saluted. The Brigadier seemed surprised, stopped the jeep and came back to ask my friend's name. "My name is...... Why?" "Oh", said the Brigadier, "I merely want to say thank you for the first salute I've received in three days."

That story is true though I expect the Brigadier exaggerated a little. I know, however, from personal experience, that, in this big station made gay by the red hats of senior officers and police, saluting is so rare as to be remarkable. And I am talking about the Army and not the R.A.F. Africans are fair, Indians poor, British bad, and officers, though they probably salute the most on a percentage basis, are disgraceful—not so much because they only salute when they absolutely have to, but because they make no effort to check O.R.s' when they are not saluted themselves. That is the situation in India, or in one part of it. In "forward areas," where some relaxation might be excusable, it is, in fact, better, though still by no means good.

"Old-fashioned nonsense"—"Colonel Blimp"—"Ruddy tyrant," I can hear some of my readers say. The fact remains, however, that, in nine cases out of ten, good saluting, together with smart turn-out and soldierly bearing, do denote a good unit. It is significant that competent observers report that saluting in the Russian and Australian armies towards the end of the war was first-class. It will be remembered—by the Germans and Japanese at least—that they were pretty successful in action too!

There are two possible alternatives to set matters right. The first is to insist on rigorous enforcement of existing orders; the second to amend orders so that we can more easily enforce them, while making sure that discipline does not suffer. Is the first possible? With the example of the Navy, who have altogether different rules, the Air Force and the Americans always in front of us, I doubt it. Officer and men, anyhow, seem to have reached tacit agreement that the orders will not be obeyed. Now it is a truism to say that an order which cannot be enforced is a bad order, so I fear we must face facts and change the orders.

Having done that, we must enforce obedience, and the officers and others who do not take action when the offence is committed will be deemed more blameworthy than the actual offender. Together with this must go a little propaganda to convince doubters that saluting is not a sign of subservience or inferiority. For instance, are the men of the Russian and Australian armies subservient? Are our own Guardsmen inferior? The answer is clear. Saluting is a form of greeting designed for the armed forces, comparable to the way in which "party members" raise the open hand or clenched fist. There is nothing derogatory about it at all.

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Now what shall the rules be? Well, so long as they are sensible and yet designed not to undermine discipline, I don't think it matters much. I suggest that salutes should not be given in places where officers and men are definitely "off duty" and enjoying leisure or amusement. In such times, saluting is probably more of a menace to the officer than it is to the man. So let us cut it out in shopping centres, cinemas, canteens, football matches, etc. In addition, we might exclude places where saluting is obviously difficult, as in travel, when we are cluttered up with arms, bags, equipment and heaven knows what-all. Then, no saluting will be an order, as it is on operations. It will not be just a relaxation of a rule we cannot enforce.

To balance this sensible concession, saluting in and around barracks and camp areas and, of course, on parade, must be impeccable. Offenders must invariably be checked and, when necessary punished. There are surely many other points to consider. The principle is clear, however; make our orders practical and in keeping with the times, and then enforce them.

FROM TOBRUK TO THE RUSSIAN ARMY.

"Among the German prisoners captured in France were a certain number of Russians. Some time back two were captured who did not speak Russian or any other language that was known either to their captors or their fellow prisoners. They could in fact, only converse with one another. A professor of Slavonic languages, brought down from Oxford, could make nothing of what they were saying. Then it happened that a sergeant who had served on the frontiers of India overheard them talking and recognised their language, which he was able to speak a little. It was Tibetan. After some questioning he managed to get their story.

"Some years earlier they had strayed over the frontier into the Soviet Union and been conscripted into a labour battalion, afterwards being sent to Western Russia, when the war with Germany broke out. They were taken prisoner by the Germans and sent to North Africa; later they were sent to France, then exchanged into a fighting unit when the second front opened, and taken prisoner by the British. All this time they had been able to speak to nobody but one another, and had no notion of what was happening or who was fighting whom.

"It would round the story off neatly if they had then been conscripted into the British Army and sent to fight the Japanese, ending up somewhere in Central Asia quite close to their native village, but still very much puzzled as to what it was all about."—Free World.

UPLIFTING AN INDIAN ABORIGINAL TRIBE*

By T. K. CRITCHLEY.

KINGDOM of the Gonds! It sounds like a mythical kingdom, but only a few centuries ago it existed in the pleasant country of Central India known as Gondwana. Then the Gonds, one of the aboriginal tribes of Central India, lived as a well integrated community under their own Rajas. In those good old days the Gonds with simple, racial and religious toleration welcomed into their country settlers from other parts. Then came the Moghul and later the Maratha on-slaughts to break up their kingdom. The Gonds discovered that the strangers they had welcomed had usurped their land—from freeholders they gradually became poor tenants and labourers.

At the end of the last century the extension of Government administration into the district of Adilabad, where the Gonds were closely settled, speeded up their deterioration. The Government's policy of opening up the country brought in new communications and a flood of new settlers. The new settlers, the new revenue officers and the attendant money-lenders all found the Gonds an easy source of profit. The aboriginal tribes were up against new languages. They were almost completely illiterate, and they now found themselves face to face with new Government procedures they couldn't understand. It was simple to take them down for their land, and so the Gonds were forced back into the more inhospitable country in the hills, where many of them followed a semi-nomadic existence but at least managed to retain some of their old ways and customs.

Even in the hills persecution seemed to be following the aborigines. For in retreating they were obliged to retreat into reserve forest areas where their everyday life involved continual breaches of the law. The Gonds were in a cleft stick. On the plains they were exploited by the more advanced settlers, while on the hills they were prosecuted by the Government's forestry officers. Certainly the future looked hopeless and tragic—as hopeless and tragic as the fate of so many aboriginal tribes in other parts of the world. But within the last few years has come a complete transformation. The Hyderabad Government has introduced a scheme for looking after the aborigines which is making all the difference to their future.

It is an enlightened scheme which owes much to the Finance Member of H. E. H. the Nizam's Executive Council, Mr. Grigson, who for long has been interested in the tribes of Central India, and also to Christoph Von Furer-Haimendorf, an Austrian anthropologist, who had made a special study of the aboriginal tribes in the Adilabad district.

When the Government came to take action the stage had passed where administrative measures, such as an Act forbidding the alienation of aboriginal land, could have much effect. A complete and comprehensive plan for rehabilitating the Gonds along scientific lines had to be developed. As it evolved this plan provided firstly for the grant of free land, so that the aborigines could once again develop their own economy; and secondly for an educational system which would enable the Gonds to develop true equality with the neighbouring plains-

^{*} The author recently had the opportunity of visiting Malavai, a Gond village in Adilabad, where he was able to inspect the Hyderabad Government Scheme for improving the aboriginals in the district. Very few Europeans have had the opportunity of seeing the Government scheme in practice.

people. But there was also a third aspect which, although not such an obvious part of the plan, has certainly been fundamental to its success. The Hyderabad experiment has not suffered from the mistake, common to so many aboriginal improvement schemes; there has been no attempt to give the Gonds a new and foreign culture. Great care has been taken not to belittle any of the cherished beliefs of the Gonds. On the contrary they were encouraged to feel proud of their background. This may sound quite retrograde. But besides being sound anthropology, it can be defended on cultural grounds.

Although the Gonds are not a highly civilized race, their culture, like many other aboriginal cultures, has considerable merit. They are an easy-going people, bright, friendly, proud of their tradition and of their sacred myths and epic poems; and extremely fond of social ceremonies in which dancing, singing and miming play a big part. Socially they are a free people. The Gond is convinced of the equality of man. Their society is classless and democratic. The women have a freedom unknown in many Indian communities. To all intents and purposes they are equal to men and have a right to choose their own husbands.

Under the Government plan land grants are liberal. A number of aboriginal tribes as well as the Gonds have been nominated for benefit, but the Gonds are by far the most numerous and important. To-day a number of Gond villages have been established. Good fertile land previously reserved as State forests has been parcelled out. And new applications to the special tribes officer appointed by the Government are coming in all the time. There are no forms to be filled in—leastways I didn't see any—but a group of dusty and foot-weary tribesmen, after many days journey, approach the elevated hut of the special tribes officer who is established in the Gond village of Malavai. There are loud Ram Ram's from the group—the conventional Gond greeting—and then some very earnest talk from the leader, supported by lots of nodding assents from the others. After investigating their case the tribes officer decides whether their requests are to be granted, and if so, the land to be allotted.

Providing education is much more difficult than providing land, especially when there is such a very small percentage of literate Gonds. At the outset the major difficulty was that although the Gonds had a language—Gondi—they had no script. In the first place they had to be given a script, so that they could be taught to read and write. Then a scheme had to be worked out for spreading education as quickly as possible. Malavai, a village in the heart of the Gond country, was chosen as the centre for the experiment. There the first school was established—or perhaps it should be called the teachers' training college.

As a script it was decided to adopt the Nagari script of Marathi, with a few convenient simplifications. And this new script is being taught to the students—mostly young men—by means of reading charts. Simple pictures are used to associate sounds and letters. From reading charts the course runs to short reading books composed of well-known Gond songs, prayers and myths. The reading of what is already familiar offers special encouragement to the student and convinces him of the worth of his efforts.

When the students at Malavai are trained, they are sent out into selected aboriginal villages to start schools of their own. School requisites are provided. Equipment includes the familiar reading charts, the readers, and even such assorted equipment as musical instruments and special masks to keep away evil spirits. The latter are important, for as I have already explained the new education is closely tied with the old Gond beliefs and cultures. In all quite a

tidy sum of equipment is needed before the new village school can open, and then there is one special piece of equipment which goes to the teacher—a blue coat which proudly distinguishes his occupation and importance.

Soon after the school at Malavai opened, it became clear that the Gonds would not be satisfied with learning to read and write only their own language. As was only natural, they also saw the advantage of learning Urdu, the official language of Hyderabad. So an Urdu teacher was introduced as an important part of the curriculum. In turn this has led to a special branch of training, the training of revenue officers who can be sent out to the villages, not as teachers, but as small Government officials. Gond villages will be able to have their own people whom they can trust and understand to look after their interests in their dealings with the Government. The opportunities for exploitation will be greatly reduced.

Opportunity is also being taken of the school at Malavai to develop modern farming methods. Students spend a part of each day in the fields, where they help to support the local village and at the same time learn improved methods of agriculture. Of course this scheme is in its early stages, and it is too early to push it far, but if the plans develop as hoped, co-operative schemes will probably be introduced in the Gond villages for buying, selling, financing, etc., and it may well be that a co-operative system will develop which will overshadow the agricultural methods of the plains.

Perhaps the greatest success of the aboriginal improvement scheme has been in the restoration of the Gonds self-respect and self-confidence, which had been badly shaken by the contempt other castes had shown for their way of life. They now feel that their religion and myths are not to be despised, but along with their language are worth putting into print. Their songs and dances had been ridiculed on the plains but now they are encouraged. Great dance festivals after the harvest, when bands of men and women dressed in finest finery wander from village to village to dance and sing with their friends are being restored, and so are many other ceremonies and rituals. For example, a flagraising ceremony which is an old custom for an important event has been adopted to mark the opening of new schools.

Gond dancing is graceful, if a little monotonous. The tribesmen swing round and round with their arms outstretched. In the case of those brought up in the tradition there is a special grace and rhythm which is pleasing to watch, but the Gonds from the villages on the plains are still a little clumsy and inhibited. Apparently the women still feel the effects of the disapproval of orthodox Islam and Hinduism with which they came into contact. Only after much persuasion will the women dance before strangers. But they danced for us—furtively for a few short minutes—and then, one scuttled back to the ring of the audience and within a twinkling, morale completely shattered, they were all gone.

Malavai village, the centre of the new learning, still has its witch doctor—not a witch doctor by the standards of our imagination or of films—but a dhoti, coat and turban witch doctor. His main claim to fame seems to be his dancing prowess; he could have been wonderful at the old time waltz. He also has another claim based upon his old muzzle-loading gun. With smooth pebbles as bullets he had once chased after a tiger—but only under extreme provocation. The tiger had snatched away his two small sons. Nevertheless it must have taken great courage, for the Gonds hold tigers in the greatest awe.

And on the subject of personalities it was interesting to find that there is still a Gond Raja. He is a slim old man of nearly 70—full of handshakes,

courtesy, and whenever possible locally brewed toddy. He is a likeable old rascal, although he has recently incurred the displeasure of the special tribes officer by taking as a third wife one of the young girls of Malavai. The old fellow is not at all pleased with the new deal for the Gonds, although tactfully he is careful where and how he expresses his opinions. His grouse, I suspect, is that as a comparatively large landowner he doesn't appreciate his tenants leaving to get new land from the Government.

But in spite of the hostility of a number of people who don't like to see a lucrative field for exploitation closed, the scheme for improving the aborigines of Hyderabad is progressing smoothly. The Government is giving generous and praiseworthy support. The officials carrying out the scheme, such as the special tribes officer and the head teacher of the Malavai school, are extraordinarily enthusiastic and sympathetic. And the Gonds themselves with their enthusiasm and capacity are proving that backward peoples are not lacking in intelligence once they get opportunities. The Gonds may never again have a flourishing kingdom; but at least there is no reason why they should remain a backward, inferior people in the Adilabad district of Hyderabad.

PROTECTING BRITAIN BY DECOYS

Portsmouth was attacked by air in April, 1941, and everything pointed to the coming of a heavy air raid. But after only 8 bombs had fallen on the town the attack appeared to shift away. The droning of aircraft continued but all the other bombs, hundreds of them, fell outside the town. It was one of

the most conspicuous successes of the decoy protection of Britain.

When war began it was difficult to simultate pre-war R.A.F. stations by any practicable form of decoy. But there were a number of satellite airfields which it was possible to copy effectively. Dummy satellite airfields were provided by levelling hedges in open country; dummy aircraft were suitably located on them, as well as dummy dumps, roads, tracks, and machine gun posts. These airfield decoys were successful in drawing 36 attacks in 1940 and early 1941. Four dummy factories with airfields were also constructed in 1940 to protect aircraft production centres; they were provided with parks of derelict cars, roads, smoke from chimneys, and dummy aircraft were parked on the airfields. They drew nine attacks by day and 14 by night.

For dummy airfields at night it was only necessary to simulate the lighting used on true airfields. Flat ground was not required, hedges and arable land presented no difficulties, as lights were carried on poles and cables buried. To avoid our pilots being deceived, differences in lighting were arranged, recognisable only by British and American pilots. Two hundred of such decoys were built, and by the end of June, 1941 scored 322 attacks, against 304 attacks delivered on R. A. F. airfields at night. By the end of the war the attack figures

were 443 on decoys and 434 on true airfields.

Decoys also protected built-up civilian areas. By using three types of inflammable material it was possible to build up a large fire which would simulate a conflagration in a town. Various forms of "permitted" lighting were railway marshalling yards, including shipyards, coke and other lighting. hundreds Many bombs intended for Bristol were drawn off by these decoys; at Cardiff 150 bombs were drawn in one night by a single decoy protecting that city. It is estimated that "decoys" saved 2,500 lives, over 3,000 wounded, and millions of pounds worth of property, apart from delaying war work.—His Ministry News Service.

A BURMA TOUR NOTE

By "A. D. C."

EVEN now that the war with Japan is over and the danger of ambush and sniper gone, a journey through Burma is rarely without incident. The people of the country are settling down to "normal" conditions remarkably well, but one must still be ready for any sort of surprise.

Recently my General and I as his A. D. C. had occasion to go from Meiktila, his H.Q., to Thayetmyo and Allanmyo, two towns half-way between Magwe and Prome, one on each side of the Irrawaddy. As there was still dacoity and also a little trouble with the Burmese local forces, we took an escort of a Lance Naik and six men, as well as the Jeep driver. Leaving Meiktila at 1500 hours, (a late start, true, but the General had already travelled 140 miles during that morning), we were due to reach Yenangyaung that evening. We thought we had left plenty of time to arrive in daylight, for just this side of the town there is a difficult *chaung** which we were anxious to cross before dark.

That morning the General had had a puncture on the Jeep, the first for 3,000 miles. It should really have warned us that this might not be a lucky trip. We had not gone 10 miles before the trailer of one of the escort Jeeps worked loose and turned over; fifteen miles further on we had our second puncture of the day. Though neither incident was serious, both held us up. Later, passing the extinct volcano Mount Popa, we saw ahead the pitch black clouds of a gathering storm, seeming at first to avoid us but finally cutting us off with an enormous left hook. Some thirty miles from our objective we saw quite clearly what looked like a solid wall of darkness. It was rain, tropical rain, and a Jeep, whatever its other qualities, cannot be considered waterproof.

Out of the storm at last, the other Jeep's trailer had a puncture. It was now quite dark and it looked as if the rain would have so swollen the *chaung* as to put it out of action.

Here came one of our strokes of luck. Our headlamps were strong enough to show us a clear way across and, though the water was well above our axles, we crossed without incident. On the other side we met a rather wet and miserable Civil Affairs officer who had been waiting throughout the rain to guide us to the bungalow of the Deputy Director of Civil Affairs, with whom we were to stay. Here we were relieved once again to find how quickly a good drink, a good bath, and a good dinner can dismiss even the memory of fatigue and discomfort. For myself, however, I could not get over my bath; it was the first European style one I had had for nine months.

Next morning we started out full of confidence, but less one Jeep trailer—the punctured wheel was beyond further repair. We had only a road run of two hours, and were to finish our outward journey by river launch. Despite another puncture—the third within 24 hours, two at least caused by six inch nails still clearly visible in the tyre—we were on the Ruth only a quarter of an hour after schedule and spent a very pleasant four hours cruising down the river. The white pagodas and poongyi kyaungs, backed by the green hills, made a most admirable landscape, and the view of the banks was greatly enhanced by the country craft in great number on the river. At one time a whole fleet came

^{*} Chaung=water-course.

sailing up together. Their enormous patched sails, helmsman squatting motionless high up in the stern with his large white cheroot, the gentle regular movement of the boats, all made the sight serene and graceful. I thought at the time of the advantages of a life like this, the very reverse of wartime tightly programmed days. How delightful not to have to worry at being a week late at any given place!

We, unfortunately, were late. The river journey took longer than expected, and we arrived at Thayetmyo at 16-30 hours, an hour and a half after schedule. After inspecting the detachment of 4 Jammu and Kashmir Infantry stationed there, the General was introduced to the local magnates. They provided a sight which I was to see repeated more than once in the next few days, but one which never lost its fascination. The Burmese have a dress sense no less strong in their men than in their women, and all present were dressed in reds, purples, scarlets, blues, with contrasting blacks, all of which made the dull office a blaze of colour. They were chiefly respectable venerable old men, here and there an odd European trait, English shoes, spectacles or even trousers. Almost without exception they wore the pale pink bandana that made them look for all the world like retired pirates.

The hospital of the town was still in working order for, though found in a filthy condition, it had been used for the sick by the Japanese. The pride of Thayetmyo—an hydraulic-action operating table—still serves its purpose for appendices and amputations. The gaol, on the other hand, had received a direct hit from a 500-pounder earlier this year, while another bomb, unexploded, lay casually by, protected by a few timbers and a piece of corrugated iron. The prisoners there seemed quite happy in patching up their quarters, though there were but 96 convicts in a building designed for 1000. The police station was full of untrained, enthusiastic recruits who produced energetic, if a little unorganised, movement. It was raining when we arrived, and the guard refused to leave its dry guard house, despite it being on a first floor. The guard's present, ceremonial and with full (though erratic) bugle calls, was solemnly carried out in the small closed room.

In the evening we were guests at a special *Pwe* arranged rather hurriedly. Some way out of the town, and in a rather muddy field, a packing case stage had been erected, lit by incandescent lamps. Ninety degrees to the left was an awning with tables and chairs, where we sat and were served with small sandwiches and cups of—of all things—cocoa. Squatting quite contentedly in the mud were practically all the residents of the town, watching everything intently, although occasionally a few would go off to one of the food stalls enterprisingly set up by the entrance. Soldiers in the audience were presented with free cigars by the local townsmen.

On the stage it was difficult to understand what was going on; people wandered on and off without any apparent reason and, at any moment, the stage hands would unconcernedly walk on and tend the lamps. A young girl, her face smothered in the white powder that is a Burmese mark of beauty, did the most astonishing acrobatic dances in a skin tight loongyi. A male acrobat, on the other hand, made a great show of his capabilities before each of his tricks, most of which could have been done by a soldier at his P. T. C. For the most part the audience was silent, but intent. Suddenly there was a gale of laughter, cheers and catcalls. I asked a Burmese by me what had been said. It was a joke about the controlled price of meat!

Early the following morning we crossed the river to Allanmyo. Much the same procession from hospital via police station to gaol followed, an utterly destroyed cotton oil mill taking the place of the blown-up cement works that we had seen on the previous day. At the experimental farm outside the town, where most of the land had been allowed to run wild by the Japanese and the rest had been used for normal cultivation, efforts were being made to trace old records and so start up again at least some of the old experiments.

We dined with Mr. Karapiet, the township officer, young, unassuming, thoroughly Westernised. His wife, a charming young Burmese who spoke perfect English, met us at his house and seemed thoroughly at home among the dozen or so male potentates who had been invited. Conversation showed much bitterness against the Japanese. The Karapiets themselves had not suffered active persecution, but had avoided it only by constant movement from place to place. One of the doctors present had actually been taken away to a Labour Camp as a result of anonymous letters stating that he was in wireless communication with the Allies. He was released after some few months, but his less fortunate brother-in-law had been longer in such a camp and, although finally let out, died of heart failure when he heard a rumour that the Japs were after him again.

As we were sitting quietly chatting before lunch, a most violent cater-wauling started. A Burmese band had arrived in the room consisting of what looked, to an initiated English eye, like a wooden xylophone, a raspberry-blowing saxophone and a one-string fiddle with the conductor shouting raucously at odd times. To me there was no music in it, and I was grateful when shouting above the din was made unnecessary by the band removing itself to a distance as quietly as it came. Of the meal itself I will only say that it was quite the best that I have ever had in Burma, but with the disquieting, yet usual, habit of producing an additional immense course every time that one had thought that all was over bar the coffee.

On our trip back to Magwe, this time by road, we were faced once again with the prospect of a tricky chaung to be crossed at the very end of the journey. We left an hour later than intended, but made excellent time until we arrived at Taundwynggi, where we were suddenly stopped by a Burmese policeman standing in the middle of the road and waving us down a road to the right which led to the Civil Affairs office with the usual caparisoned local big-wigs. News of the trip had gone before us, and it was quite impossible to get away until the General had shaken hands with all of them and had had some tea. This eliminated our margin of error but it was by no means the last of our troubles. The escort Jeep had another puncture and, though we finally left it behind, we were now later than ever. Then, owing to the army habit of marking all cross roads except the important ones, and the Burmese custom of indicating distances from Rangoon and from nowhere else on milestones, we missed the road. We covered twelve miles before we found out our mistake, and then only by a fluke. Off we started back—and punctured once more.

We arrived at the *chaung* firmly convinced that we should spend the night in the Jeep by the side of the water. Luckily both an officer from our hosts at Magwe and a Recovery Unit Serjeant Major were there to meet us and to tell us that, although the *chaung* had been out of action for most of the day, it was now passable by means of the special ferry. This "ferry" consisted of two narrow canoes lashed together with duckboards on top so that "a Jeep and trailer go on easily." "Easily" was rather an exaggeration for the front wheels of the Jeep loomed over one edge of one boat, while the wheels of the trailer

almost fell off the far side of the other. At any rate, we were on and, with foot pressed very firmly on the brake pedal, we started off.

Manpower was the driving force, and at least a score of yelling coolies pulled in all directions on the two tow-ropes. I say "in all directions" for that indeed is the way it looked and, additionally, everybody seemed to be shouting different instructions. But we went up the stream and down again; up a second time, then floated rapidly down with all the men leaping for dear life on to the boats. Suddenly we were there. The exact technique of crossing I shall never know, for the darkness and cacaphony of yelling made the whole proceeding utterly unintelligible. But certainly we arrived on the other bank safe and sound.

The journey was nearly over. The following morning the General took the salute at a ceremonial march past of the 4th Jammu and Kashmir Infantry at Magwe. An excellent parade it was, too, by a Battalion that has made a great name for itself. Later we went the rounds of Yenangyaung, the hospital, the police station. Subsequently we were shown round the derelict oilfield by (now) Brigadier Armstrong, who had helped in its enforced destruction in 1942. As a final send-off, and just to make sure that there was no further chaung trouble, a large crowd greeted us at the place which had so occupied our thoughts on the first night. At a call from the senior policeman present the mob, with the usual wild cries, all rushed into the water, strung themselves out across the river, and stood waiting to push should the Jeep stick or slide off the narrow submerged track with the strong current.

It didn't stick. We arrived back at Meiktila whole and even on time, after three "normal" but eventful days. We had travelled 680 miles in three days over roads that were anything but good, and had walked a good many miles into the bargain. How many hands had been shaken will not bear calculation!

PIGEONS IN WAR

Broadcasting from London recently, Squadron Leader Allan Melville said:

"Some of our pigeons had some amazing exploits to their credit. One of them, 'Canone' made over 100 bomber ops, and 17 days after the aircraft carrying her crashed without any news concerning her, she returned to her loft with her breast bones open and most of her feathers shot away, but with the information we wanted. 'Canone' got the animal's V.C. for that.

"Royal Blue," a pigeon owned by H. M. The King, brought back the first message from an R. A. F. crew who had crashlanded on the Continent. But of all the pigeons who did such magnificent work in the war, "Lustaff" was the one in which I was most interested. He was one of the quartette that I took with me on the invasion; we called them Blood, Sweat, Toil and Tears and a lot of other things besides, when we had to change their water or feed them at awkward moments during the landing. When we released Lustaff on landing on the beaches, he took one look at what was going on, and I've never seen a bird beat it for England, home and duty at such speed. I must say I couldn't blame him, but he got his message back in time to catch the evening papers, and later on he, too, was awarded the V.C."

WHY NOT A RAILWAY TRANSPORTATION CORPS ?

By D.M.H.

MILITARY Transportation, by which is meant the movement of personnel and stores by rail and inland water transport and through docks, has now assumed such importance, not only by virtue of the magnitude of the task but also of the influence it exerts on operations in the field, that in any post-war reorganisation of the army the whole subject will require special consideration. Before making suggestions for the future, a retrospect of Military transportation, with special reference to railways, during the last half century is necessary.

For many years the army has had a small number of R.E. Officers and other ranks with railway experience and knowledge. These sufficed to deal with railway construction and movement during the small wars in which Britain was involved at the end of the last and the beginning of this century. In 1914 whole countries, as distinct from small professional armies, went to war, and, as their transport was naturally beyond the capacity of the few railway trained regular soldiers, civilian railwaymen were brought into the army, where they fulfilled their professional or technical role. Such men were available in sufficient numbers throughout the Empire to cope with all the work that they were called upon to perform. As soon as possible after the Armistice in 1918 these civilians were returned to their railways, and the transportation position of the army returned to that which existed in 1914.

During the years of peace from 1919 to 1939 there existed in the army no transportation service in being. There was, however, the small railway school at Longmoor where railway trades were taught but where railway experience, in the full meaning of the word, could not be obtained; such experience is found only in the actual working of a modern full scale railway system.

In addition there were certain railway and dock units of the Supplementary Reserve of the Royal Engineers which were formed by the four English railways. In these companies each man was a specialist at his railway task, but he could not be classed as a trained soldier for the only military training he received was an annual camp at the railway school at Longmoor, where in addition each man had a busman's holiday working his civilian job under army conditions. This annual camp undoubtedly had the great advantage of assisting to weld the various companies into a working unit. These companies, although few in number, were unquestionably a most excellent nucleus around which the Transportation service could be expanded, in addition to being immediately available on general mobilisation. In India there was a somewhat similar organisation although it existed only on paper, the men never undergoing any military training and merely drawing a retaining fee. The unit was never mobilised.

There were also a small number of regular R. E. Officers who were employed on civilian railways throughout the Empire, but mostly in India. These officers, who joined the railway at a young age, spent their whole working lives as railwaymen in civil employ, except when a war intervened when they were liable to recall to the army. These officers, who, besides having received the training of a regular soldier, were fully qualified railwaymen, were of course invaluable in the transportation work of an army.

This was the position in 1939 when war broke out. The Supplementary Reserve companies in England were mobilised, but were quite insufficient to deal with all the transportation work that had to be performed. The regular R.Ec Officers were recalled to the army from their civilian railways, but they also were few in number for the tasks to be undertaken. A call was made upon civilian railwaymen and a considerable number came forward, but as this war has been so essentially a transport war, civil organizations were promptly called upon to carry vastly increased loads, with the result that they had to retain a large number of trained staff in order to be able to answer the calls made upon them. Men and officers with no railway background at all were drafted to Transportation Units, and steps had to be taken to turn them, not only into soldiers, but railwaymen. Some dilution is always possible, but in the units formed in this war the degree of dilution was, at any rate in the early years, far too high.

All Transportation units form part of the Corps of Royal Engineers or the corresponding corps in other empire armies. This applies equally to Movements staff. In so far as technical staff are concerned this is not unreasonable, but to appoint an officer or a man to the Royal Engineers for Movements work, which requires no technical engineering knowledge at all, is almost farcical. Another drawback is the tendency on the part of senior engineer staff officers to regard every engineer unit in their area as being under their control, although in the case of Transportation Units their work is completely divorced from the ordinary engineering work of a command. This applies very forcibly to the locomotive running and operating sides of railway work. So much for the transportation side of the picture. That of other branches of the Service now requires consideration.

During this war, and presumably also during the 1914-18 war, the lack of knowledge of transportation work of members of other Services of the army was deplorable. This state of affairs is due indubitably to the lack of any form of Transportation Corps during peace time. During training in the field and at staff colleges an officer is taught the functions, limitations and requirements of all other branches and arms of the Services; during manoeuvres artillery, signals, tanks, supplies, etc., all work together.

But where does transport, rail or water, receive consideration, and how are its limitations taught? A student at a staff college may, during his two years course, be given one or two lectures by a railwayman, and a few may pay a short and cursory visit to various railway installations, but this is wholly inadequate to give an understanding of the subject. The study of transport, on which the well-being of a force has increasingly come to depend, has been woefully neglected in the training of army officers.

In certain theatres in this war the result was obvious. As it was known through personal experience that M.T. required repairs, workshops were given priority: locomotives, however, appeared to run for ever, providing fuel and water were supplied, so locomotive repair facilities were low priority. Sidings were demanded for every small dump, without a realisation of the shunting and consequent delay to wagons that would result. A rail-served depot was once stated to be "rail served" only when every item could be taken straight from a wagon to its final resting place. M.T. being scarce had to be preserved at the expense of railways, which had always run with no apparent difficulty and so obviously could continue to do so.

Stores could be transferred here, there and everywhere and then rebooked when occasion arose. What else was the railway for? Anyway, its abuse made

planning war easier. A railway wagon on a siding was a most convenient warehouse. Transportation was the last consideration in the siting of depots. One senior staff Officer carried in his pocket and constantly consulted the manual describing the relationship of Transportation and Movements. One Infantry Officer who came into close relations with a railway said that in the past he thought the station master was the top of the railway tree and had nobody behind him. An exaggeration, no doubt, but a trite description of the extent of the army training in transportation.

What of the future? The magnitude of the task involved in moving modern armies justifies by itself a separate corps to undertake this work but, apart from this, the operations are so specialised that their undertaking by officers and men who are an ill fitting adjunct to an existing corps is unsatisfactory in the extreme. The United States Army has already realised this, and formed a Transportation Corps to deal with Railways, Docks and Inland Water Transport and the "Movements" side of the work. This is obviously the correct organisation, and its early adoption by the British Army is most desirable.

Assuming that a Transportation Corps is formed, how is it to be employed and trained in peace time and expanded in War? As movement by train in modern war requires operation over long main line railways, training on small railways of the type at Longmoor does not produce men with sufficiently wide knowledge or experience of the multitude of problems that arise daily on intensively worked trunk lines. In the past this experience was gained by all ranks of the Royal Engineers on Indian State Railways, who at an early age, were lent to these railways and spent their lives there essentially as civilian railwaymen under civil conditions, except for the occasions during war when they were recalled to the army. This is, of course, the opposite to the Supplementary Reserve, where a civilian gains a smattering of military knowledge during his annual training.

A combination of these two systems would appear to solve the problems of the expeditious production of railway units in time of need. Railways all over the Empire would form S. R. Companies, and in addition a number of personnel of all ranks who have been given a thorough military training would be posted to civilian railways, where they would spend their lives in a civilian capacity but always available for recall. These regular soldiers would be divided among the S. R. Companies, where their Military training would be invaluable.

One obvious criticism is that the calling-up of all these men on the outbreak of war would leave a large void in the civilian railways. This is undoubttedly correct, but as the units would be spread over all Empire railways the void would be divided into a number of small parts. In War, moreover, dilution has to take place in all branches of national effort. It has had to be adopted to a large extent in Military Transportation Units, which, in spite of this, have been able to carry out their duties. Why should not civilian railways be able to do the same should another emergency arise?

To sum up, Transportation requires the formation of a separate corps which must in peace time be trained on highly developed civilian railways. On mobilisation the Transportation Corps would find itself composed of regular soldiers and volunteers, all with full knowledge of their profession and trade and with military training to a varying degree. Many units would be immediately available, while other personnel would be used as a nucleus for new units where dilution would be just as necessary as in the civilian railway the trained men had left.

These proposals apply particularly to railways, but are equally applicable mutatis mutantis to other branches of Transportation.

AN I.A. OFFICER LOOKS TO THE FUTURE.*

By "Anand".

THE youth of India is thinking today, thinking more than it has ever thought before. A number are still steeped in general apathy; others are seeking new fields for action. They are asking for a realistic approach to each problem; they want to know what they are to-day; why they are so; and what they can do by self-help to better their position.

The re-organisation of the post-war army is so dependent on the settlement of the political problem that a reference to it is unavoidable. Certain trends of thought which we may assume to be true are that contact with the British had made India conscious of certain world moving forces; that Britain has helped to modernise India, and has made progress possible; that India's future development has to come in co-operation with the British, whatever the political status of India may be; that the average Indian has no dislike of the British, and that he recognises obligations towards the British and seeks their continued friendship.

Other general trends of thought which may be assumed to be true are that the position of the Indian States as it exists to-day is an anachronism, and that there is no place for sovereign blocks scattered about at random throughout the country; and that the recruiting for the post-war Indian Army has to be spread evenly throughout India, and all the people given an equal opportunity of taking their share in the defence of the Motherland.

Existing differences in India are the result of conflicting forces working over a number of centuries, and their permutations and combinations have now reached to such a magnitude that it is not going to be a simple affair to remove them. The best we can hope for at this stage is to get a clear, dispassionate knowledge of the existence of such differences, gradually to educate people to realise their unsuitability in present times, and to develop self-confidence and mutual respect, which alone can bring about unity.

Progress in India can no longer be conditional on achieving a measure of unity. The British Indian Government is carrying on throughout, and must continue to do so. In doing this it ought to foster unity, not by drawing attention persistently to the existing dis-unity, but by creating conditions in which unity is made possible. Unity has to come from within as a result of realisation of the interdependence and brotherhood of man, and not arbitrarily imposed.

Such a problem as having a common language for the whole of India cannot be satisfactorily solved arbitrarily to-day. There is ample scope in India for autonomous Provinces re-grouped on a cultural and linguistic basis to develop on their own lines, without developing conflicting inter-Provincial differences. This development on Provincial lines need not necessarily prove a block to the unity of India as a Federation of autonomous States with sovereignty at the centre. The fact that the continent of Europe shows such contracting racial, economics, linguistic and political differences, that small territories like Luxembourg, Switzerland, Belgium, etc, can develop on their own lines as separate entities without

^{*} This fraukly -written article by an Indian Commissioned Officer is well worth serious study because of the well reasoned and thought provoking arguments it contains.

hindering their progress, is alone sufficient reason for us to recognise that progress in India cannot and ought not to be made conditional on obtaining unity amongst the races and religions in India. A modern state cannot be based on a racial or religious basis; it must be based on recognition of the common citizenship, or the four freedoms.

In the light of the above assumptions, insistence on making Urdu the common tongue for the Army appears baseless—but this does not do away with the advisability of having some common lingua. Here are some reasons against having Roman Urdu as the common lingua of the Army: (i) the old state of affairs when the majority of soldiers came from Northern India and spoke some variation of Hindustani, no longer applies; (ii) the Madras classes speak English, which had to be recognised as the medium of instruction for them during the war; (iii) even in peace time, when a non-Urdu speaking Sepoy took an average of five years to become an N.C.O., and was all the time learning Roman Urdu, he was greatly handicapped at Schools of Instruction for want of proficiency in Roman Urdu; (iv) Roman Urdu learnt by non-Urdu speakers of no practical use to them on return to civil life, because it is not spoken nor understood in the villages, nor is it any asset to them in their contacts with civil officials who are equally non-Urdu speakers.

Literacy in India probably does not exceed 15%, which means that the majority of recruits will still be illiterate when they join the Army. A man's ability to read and write in his Mother tongue is essential for his education as a good citizen. The highest cultural values in a man can only be imparted or brought out through the medium of his own Mother tongue. All progress comes from cultural development, and it is therefore the Army's responsibility to see that the recruit is culturally developed through the medium of his Mother tongue if he is to be the ambassador of a good citizenship. Having obtained this condition in the initial stages of the recruits' training the stage is set to give him a lingua common to the Army.

English is now the common tongue for all educated people throughout the country. It is the medium of higher instruction in arts and sciences, and will continue to remain so. Basic English is the international language of the future, and there is therefore a strong case to teach Basic English to those sufficiently developed culturally. The Indian soldier, if he is to co-operate efficiently with the British soldier, must understand Basic English. The common lingua of the Indian Army must therefore be Basic English. The Indian soldier must first master his Mother tongue, and then go on to Basic English. The teaching of a third language—Roman Urdu—throws an additional burden on his mental energies—energies which can usefully be employed in other spheres.

Urdu, written in the Roman script, has in unmistakable terms been laid down as the latest language policy for the Indian Army. Until recruits are able to assimilate instruction and understand orders in Urdu, the vernacular may be used, but this latter stage is to be cut to the barest minimum. It is good to note that the desirability to spread a knowledge of English amongst all ranks is also realised.

But why this emphasis on Urdu? It is not to be even the old-time Hindustani, an unpleasant admixture of Urdu and Hindi or its counterpart as now used by All-India Radio. If it is to be accepted that there is urgent need for "a drive to make every man literate in his own vernacular before he is released or demobilised," and that "this training is compulsory", surely it is a clear acknowledgment

at the same time of the failure of Urdu for use as the *lingua franca*? The problem of settling the soldier in civil life is peculiar to the post-war period only in its magnitude; the problem will exist at all times. Unless and until a man can express himself well on paper and be capable of taking in higher instruction through the medium of his Mother tongue, he is likely to labour under a great handicap. Proficiency in Mother tongue also helps to bring out cultural values in man.

Much is often made of the difficulty of preparing suitable training manuals in different vernaculars. This seems to be a fallacy, bearing in mind the progress made by the vernacular Press and the possibility of its increased efficiency with the spread of education. The production of a standard vocabulary of simple English words, such as "gun", "bivy", etc, for which no suitable counterpart exists in vernacular, would greatly simplify the work. It would then be possible to educate the recruit simultaneously in vernaculars and Basic English, with a gradual change-over to English for technical subjects. Subjects like citizenship, geography, history, etc., can continue to be taught in the vernacular in order to simplify and speed up the education.

Three factors govern the march to progress. First, availability of men with vision and drive; secondly, obstacles placed by vested interests, our own and foreign; and thirdly, general apathy amongst the masses.

Lack of men in India with a clear vision and forceful drive is lamentable. Everyone poses to be a leader in the general disorder for his personal benefit. Vision and drive can only come out of a clear understanding of past traditions, manners and customs, and why they took particular forms, why certain inhibitions were placed on the actions of man; and how these now retard our progress.

Emphasis on the existing differences and disunity between religions and races, without suggesting remedies or without creating conditions which tend to do away with such differences, is soul killing. One is thereby putting a premium on these differences, removing the very basis on which education depends, viz., self-confidence and self-respect. The cry to-day is leaders, and more leaders of the right type, who will exercise a dynamic influence over the masses.

Vested interests are there to be contended with. When these are referred to one's mind automatically turns to "foreign" vested interests, "foreign" capital, "foreign" interests in services. Only a few realise that there are similar and even more powerful vested interests of our own, which are all the time out to benefit themselves at the expense of the public. During the war these vested interests openly threw off their cloak and brought about tragedies which affected the whole countryside, such as the famine in Bengal, the racketeering in food and cloth, the making of enormous profits by industrialists and contractors. These vested interests cannot be got rid of without removing the conditions in which they thrive and prosper; a satisfactory handling of the first and third factors which I have mentioned as governing the march to progress will in themselves do much to do away with vested interests. Meantime, all that can be done regarding them is to get a clear understanding of the problem.

General apathy amongst the masses is by far the most dangerous enemy of progress. The masses must be aroused to a sense of self-realisation, to the need of service and sacrifice, self-help, self-discipline, co-operation and mutual aid. The idea of citizenship is at present non-existent. The average man is apathetic. He is mentally lazy, fatalist, prone to inertia, blind to his own interests. He is gullible and liable to react in strange ways to insidious propaganda directed towards exploiting his ignorance.

The average Indian soldier is no exception. After all, he comes from the masses and returns to them. What little he learns regarding the benefits of good citizenship are soon forgotten when he returns to civil life. In the Punjab, perhaps, in the past, the existence of a large majority of ex-servicemen has helped to spread the gospel of good citizenship; has helped the serviceman to maintain his solidarity and prevented him from falling back into the old stupor. The efforts of Brigadier Brayne are unique in this respect, but they are solely confined to the Punjab. Conditions throughout the rest of India are different, and these conditions are likely to prevail in future with dispersion in recruiting areas. It is time the danger of the soldier going back to a life of lethargy was clearly recognised and guarded against.

Soldiers returning to civil life should be ambassadors of goodwill; living illustrations of good citizenship; live forces. To-day the soldier is not any of these. Can we make him so? An attempt is being made to do so during the prerelease period through education, which includes discussions on citizenship., films, lectures and pamphlets; through visits to places of cultural and economic interest; and by various other methods designed to stimulate minds and make men realise there can be no progress without work. Civilian masses must be made aware of this fact, and informed of the ways in which the ex-serviceman can best assist in the general uplift campaign.

One often reads with concern that "suitable officer material for the Army is not forthcoming", and that "Emergency Commissioned Officers are not volunteering in sufficient numbers to accept permanent commissions." Various reasons are advanced for this state of affairs. I feel the real reason is deep-rooted. No one has come forward openly to acknowledge it because of its unpleasantness and bluntness.

I have talked to a number of my fellow Indian Officers about it and probed their minds. The average Indian Officer of to-day (and the majority are now E.C.Os) is signally lacking in vision and drive. A large number joined the Army because it was more paying than any other vocation, and considered to be comparatively easy going. The majority have confessed to me that they joined the Service with false hopes, that they are simply jogging along, have no interest in the Service nor in the men they command, and are eagerly awaiting release.

The majority are highly conscious of their incapabilities, have developed a high degree of inferiority complex. Maybe a number were probably done down and have good reasons to complain. Misunderstandings have arisen over the treatment given by British officers. But there is no denying the fact that the Indian has taken offence where no offence was intended, that he has never attempted to explain his own viewpoint to the British Officers, the majority of whom are unavoidably ignorant of the Indian mentality. The Indian has been inclined to draw hasty conclusions to fit in with his preconceived, pre-determined mental complex.

No sooner do I ask a strange Indian officer how he has been getting along than a long string of complaints is poured out—how he has been deliberately supperseded by inefficient junior British officers, hustled from place to place to make room for Britishers to occupy more lucrative posts carrying higher rank, and that he has never been given any opportunity to prove his worth.

I maintain that the majority of these doubters find a useful cloak in these complaints to hide their own inefficiency. They are determined not to help

themselves, and have unwittingly spread a pernicious propaganda amongst the civil that the Indian Army is still the guarded preserve for the Britisher, and that the ripe plum will never sweeten the Indians' mouths. Indian Service personnel occupying senior responsible positions can help a lot if they travel more, mixifreely with the junior officers, particularly those of the ancillary services, and explain matters or reason them out. Indian Senior Officers should make a conscious effort to seek their co-operation in an all-out effort to improve the junior's mental outlook, and impress on them the need to subordinate their personal advantages for the sake of the general good.

There could be no greater tragedy than that the Indian Army of the future should be saddled with such unenterprising, easy going, irresponsible class of officers. Unfortunately, such men to-day are looked upon as a model of Indian aspirations, cajoled and permitted to enjoy their self-complacency. I do not for a moment deny the existence amongst the present officer ranks of potential suitable material, which, if carefully picked, trained and guided, will be the true torch-bearers of Indian aspirations. I feel that this potential material either prefers to keep aloof, or else its potentialities are not recognised and no encouragement is given them.

The Boys Companies have fully justified their introduction, and their numbers should be increased. The immediate increase in the K.G.R.I.M. Schools is to be welcomed. The Committee appointed to select E.C.Os for permanent commissions will undoubtedly help in improving the officer material in the Indian Army of the future. But these efforts will not be enough to meet the everincreasing demand for "good leaders" that exists to-day in all branches of public life. Private educational institutions throughout the country should be given suitable facilities and encouragement to produce young men with character. Boy Scouts, Girl Guides and similar youth organisations should receive State support to enable them to take in increased numbers.

I have the highest praise for those officers and men who, in a spirit of good comradeship, have played a man's part on the battlefield and won laurels for themselves. The stress and strife of active service, the feeling of expectancy of soon getting at close grips with the enemy, has acted as a stimulant to draw out the best qualities in man. Indians have conclusively proved that they can do it. In the flush of recent victories these men of action may continue for the time being to exhibit the same high qualities of courage and proper grasp of realities. But that is no guarantee that the same spirit will be kept up when it comes to the "Fight for the Peace" unless steps are taken in good time to see that he does not relapse to the conditions of apathy from which he arose.

No general increase in amenities will prevent men from relapsing to an apathetic state. High morale is intimately bound up with improved standards of living and organised social and recreational activity, so as to strike a happy balance between work and informed pursuits of pleasure. Men should be made aware of the joy of conscious living and the need of a balance in all their activities directed towards material pursuits.

To achieve this, peacetime routine in the Army should be brought into line with the normal pursuits in ordinary life. If one year's intensive training can turn out an efficient fighting soldier, surely there is no reason in peacetime for a repetition year after year of the same cycle of individual and collective training and stereotyped manoeuvres? Once a recruit is fully trained, the perods for a

refresher course each year can be considerably reduced with judicious planning, thereby allowing time for other pursuits.

In addition to military training, the soldier should receive progressive training in his peace station in collective farming, handicrafts, cottage industries and other suitable trades and ample opportunities provided to practice them. There should be full scope for the study and practice of folklore, fine arts and other pursuits which enrich man's leisure hours. Facilities should be provided for the families to join their heads for extended periods, and take their proper share in the organised community life.

While acknowledging the need for industrialisation of the country in order to raise the standard of living, it cannot be denied that the prosperity and well-being of India depends essentially on its agricultural wealth. At present land does not pay, and there is an ever-increasing drift from villages to cities, only checked temporarily by the rising unemployment and lack of living facilities in the few already overcrowded cities. But little, if any, attempt has been made by the people themselves to improve agriculture. A great proportion of sepoys coming, as they do, from land, are asking for services on demobilisation. This tendency must be nipped in the bud, and facilities provided for the resettlement of soldiers on land by making the occupation sufficiently attractive.

An analysis of a questionnaire sent to a cross-section of the Army sometime last year showed that only 24% wished to return to the land without any further training; 11% wished to do so after training in agricultural subjects; 8% have other assured employment to which they will return.

Why this tendency to drift away from land? It is not so much a question of finding more land for colonisation, even though all arable land, other than that reserved for afforestation, should be brought under cultivation. Much progress can be made by methods of improved farming on modern, scientific lines. To-day the average farmer is reluctant to try out new methods, as these often mean a large initial outlay over purchase of tools, machinery, etc. The farmer could perhaps be persuaded to do so if he had the money. But with low agricultural incomes, heavy indebtedness and consequent failure to make even a marginal living, the farmer cannot possibly be blamed for his lack of enthusiasm in introducing methods, new and yet untried by him.

Three essentials are necessary if farming is to be sufficiently attractive; blood-sweating manual labour should be replaced by the introduction of labour-saving machinery; the State should make the initial purchase, and hire it out at nominal costs in the initial stages; later, when the benefits are widely appreciated, farmers should be encouraged to form themselves into Co-operative Societies to undertake similar purchases. Secondly, good educational facilities, and urgently needed medical relief should be made available in villages at nominal costs; their provision should primarily be a State responsibility.

Thirdly, facilities for social and recreational entertainments should be introduced in all villages to make the farmer's life fuller and richer in outlook and experience. With a little encouragement and direction from above in the first instance, these services will grow automatically with the improvement in financial status of the farmer and the provision of the facilities mentioned in the above paragraph.

A wide gulf between civil and military has existed in the past to a varying degree throughout India. Except perhaps in the Punjab, the retired soldier

has generally remained aloof from his neighbours and lived a secluded life. The average civilian looks on him as a tool in the hands of the Government. The situation is not at all improved by the soldier putting on airs of being a better man, which in the eyes of the public in peacetime he is not, while the pittance of a pension he receives adds to his difficulties.

In a population of over 400 million, the Army can only form a small part, which has of necessity to live on friendly terms with the rest for fear of being excommunicated. Propaganda is required, and practical steps taken to raise the soldier in the esteem of these millions of people, not under the artificial stimulus obtained in conditions of war, but even in peacetime, when the Army is generally regarded as a white elephant. This means that the Army must have direct approach to the masses, and must win their co-operation.

In addition to a countrywide publicity compaign, both amongst civilians and soldiers, bringing home to both their mutual interdependence and responsibilities towards the development and reconstruction of the country, a permanent link should be established between the two, *i.e.*, some form of youth organisation, guided and assisted by the State providing the bulk of the armed forces. The Indian armed forces of the future should be a citizen force, capable of rapid expansion and highly efficient, so that it should be a matter of pride for every ablebodied citizen to have belonged to this force sometime during his lifes' career.

The system of opening separate hostels for soldiers' children in places where hostel facilities already exist, as is happening to-day in the Bombay Presidency, is not a step in the right direction. Full use should be made, where possible, of the existing institutions, perhaps after stepping them up with additional staff, monetary help and general supervision, to see that the education of the boys entrusted to their care is conducted on the right lines.

Where institutions do not exist, the local elements should be encouraged to start them with Government aid. For the rising India, this gulf between civilian and Army is going to exercise a pernicious influence, and the possible addition of the Army class to the number of classes already existing is to be deplored. For similar reasons, the soldier should not be given a separate representation in any future re-organisation of electoral constituencies.

C.L.O. and S.S.A.B. organisations are doing magnificent work in watching the interests of the soldier, the ex-soldier, and his family. The former is a new organisation, and doubtless will improve in efficiency with further experience. Ex-pensioners, although good in themselves, should, however, not be depended upon to provide the bulk of the staff. There is need here, as in any other department, for young enthusiasts who are keen and capable of studying the problem from new and different angles. The S.S.A.B. organisation is being rapidly expanded to meet the growing demands on its services; it can truly be called, and function as, "the soldiers' own."

Neither of these organisations should be considered as channels for feeling the pulse of the country, nor as mere propaganda agents. Their potential contribution towards bridging the gap between civilian and soldier is immense, and their activities should be directed towards obtaining this harmony between the two.

High officials, civil and military, tour the countryside. Often they are Britishers with their Indian assistants, who are looked upon by the civilians as

hangers-on. A number of the officials are good intentioned, and want to know the under-currents. Yet they have to a great degree to depend upon their subordinates for their main sources of information. Corruption amongst the subordinate services in India is not a new feature; and it is known that they claim no confidence from the people. They are often interested in maintaining their position, and either fail to get their finger on the pulse of the countryside, or else are too frightened to tell the unpleasant truth for fear of incurring the wrath of their superiors.

People who do have their finger on the pulse are not interested to act as informers, and so the vicious circle goes on. The true facts are seldom brought to light, or are often distorted. Best informers and well-intentioned people are loathe to incur the displeasure of the authorities by going out of their way to say what they feel, and prefer instead to keep quiet. Others are shallow-minded, find a ready listener; their opinions are taken as a true representation of the state of affairs. I make bold to make what appears at first as a sweeping statement, because I feel there is nothing lost in taking stock of what we really are and what we purport to be in the future.

The vicious circle should not prove too difficult to break. I advocate no super-Gestapo, but a few commonsense rules persistently applied should improve the situation in due course:

- (i) Base corruption should be got rid of by instilling a higher sense of general values and responsibilities.
- (ii) Pay level of subordinate services should be raised to prevent any genuine desire to supplement their salaries by other means, in order to maintain a decent living.
- (iii) These officials should be encouraged to mix freely amongst the civilians, as part of their normal duty, in social life.
- (iv) They should be free from a desire to give easy ear to persons seeking their own advancement, and no inducements, monetary or otherwise, should be offered to anyone furnishing useful information.

The soldier, if properly educated, can exercise a very healthy influence on the general public on his return to civil life. Any plans for resettlement should be based on this background of the soldier returning to the fold of 400 millions as part of them, and not as a separate entity, working for his own benefit exclusively. For this purpose the soldier, before he is returned to civil life, should receive sufficient progressive, cultural and vocational education which will assist him in securing honourable jobs, and at the same time give ample opportunities of proving himself an asset and a co-worker in the cause of general reconstruction of the masses.

Post-war reconstruction schemes already launched, and those to be undertaken, depend for their success on the availability of trained workers. The Army can and must provide these trained workers, enthused with vision and drive. The dangers of dealing lightly over this subject of what the Army can really do to-day, composed as it is of officers and men alike steeped in apathy, have already been considered. It has also been shown that potential material from which suitable workers can be found is already there.

The success of the whole drive will depend primarily and fundamentally on the care with which this material is chosen, and the way in which it is moulded to form a "live force" whose one motto will be "Toil and Sweat—Service and Sacrifice."

A NEW ANGLE ON CEREMONIAL DRILL.

By "DIE-HARD".

POPULAR demand for military display was provided years ago by military ceremonial drill parades. The pre-war ceremonial drill, however, had to

be abandoned during the war because :-

(a) it bore no relation to the actual requirements of modern battle formations; (b) it was complicated: required a good deal of practice for men to become proficient, and thereby wasted valuable time that could be more usefully employed; and, (c) it was considered that the close formations used in it would inculcate false lessons, i.e., the "herd instinct" as against the dispersion required in modern war.

Many people accordingly lost faith in ceremonial drill in general, consider-

ed it as a waste of time, and of no more value.

One way and another, however, there still exists a demand for some form of military display on appropriate occasions, such as shows of force to overawe hostile places that have been occupied by our troops; to pacify an area that is suffering from internal unrest by what was previously termed a "flag march"; or to impress an ally. Moreover, now the war has ended there is a popular demand for big ceremonial parades to celebrate the success of our arms in battle.

Military spectacles that impress the onlooker with the speed, massive power and invulnerability of the fighting forces are uplifting. The May Day parades in the Red Square at Moscow are the kind of thing that the public, even of pacific Britain, like to see. Quite apart from showmanship, however, another result is obtained from ceremonial drill which is of great value psychologically to

the training for war of the unit, and this will be discussed later.

A suitable ceremonial drill, should (a) provide a good spectacle; (b) be easy to learn; and (c) suit modern conditions as far as it is possible to do so. This is particularly difficult to do in the case of the infantry, and of other similar dis-

mounted arms, such as field companies of Engineers, etc.

Tank and artillery regiments, with their impressive looking armament, do not require to modify their normal methods of drill. They already work to modern battle drills that are sufficiently spectacular. Infantry, on the other hand, if manoeuvring as in battle, would provide a very poor spectacle, for the better the battalion, the less of it would there be to see. "Showmanship" therefore forces one to mass the infantry, in order that they shall show themselves to advantage. Is this really such an unsound thing to do as some people would have us suppose?

My view is that the entire abandonment of battalion or regimental ceremonial drill parades robs the Battalion Commander of a very effective means

of installing a feeling of cohesion in his unit.

In its training, a battalion is usually widely dispersed. "A" Company may not see "D" Company at work for many months on end. The dispersed nature of modern training, while very valuable to companies and the specialists of the battalion, acts as a kind of centrifugal force against the cohesion of the battalion as a fighting entity which the Battalion Commander is ever trying to fashion. Even collective training in the field fails adequately to bring the battalion into one psychological whole to the desired degree.

An infantry battalion is a delicate mechanism in battle. It can very easily become disorganised. The conditions of modern battle are for ever working towards breaking up its cohesion as a fighting machine. All the time its Com-

mander is striving to prevent this; his efforts are aimed at fighting the battle as a unit, and not a collection of independent sub-units. Anything which will help him to retain cohesion in battle should be employed.

Battalion ceremonial drill, carried out circumspectly at intervals—not necessarily frequently—is the solution. It is the physical sight of the whole battalion parade together, acting and moving as one machine, with the utmost precision, under the sole command of its C. O. that most quickly and lastingly impresses the ordinary soldier subconsciously with its discipline and unity.

I took over command of an Infantry battalion in Arakan in 1943, just after it had its Commanding Officer had been killed, four out of five Company Commanders had died, and about 300 I. O. Rs., including a very high proportion of the trained N. C. Os. had been killed. The battalion was then on its way out to retrain and re-fit. I adopted the usual methods, and as the battalion hoped to return to deal with the Jap again a few months later, nothing could have been better than the spirit in which the various sub-units of the battalion set about their training, dispersed in their various training areas. Good though the progress was in individual and Pl/Coy. training, it was soon evident that there was lacking a sense of cohesion in the battalion as a whole, partly due to its losses, and partly aggravated by the enforced separation and lack of visibility and communication when training in jungle.

Something had to be done. Just then, however, the battalion moved to N. W. Army for a F. D. reserve role. There, companies still trained in their separate areas, but the opportunity now offered itself for getting everyone together. A battalion ceremonial parade of a simplified type was instituted, at first once a week, later on less frequently. It was a great success from the start, and most interesting to see the intensity and verve of the troops taking part. It was almost as if they saw the value they were getting out of it. Not long afterwards we dropped these regular parades, as their usefulness had expired for the time being, and we continued with only one parade a month and sometimes at

even longer intervals.

I am so firmly convinced of the unifying and "tonic" effect of a battalion ceremonial parade smartly carried out, that I consider that it should be retained as a valuable training method to be used at the discretion of the C. O.

Before carrying out these ceremonial parades, we were very careful to enlist the co-operation of the ordinary soldier—the plain rifleman, and to explain to him that we wished him to enjoy the parade, in the way that any smart soldier gets a "kick" out of good snappy arms drill and precise movements. We were very careful to specify in battalion orders beforehand that:

(a) The object of the parade was to bring everyone together so that we

should all see each other and work together.

(b) That we hoped the troops would enjoy the parade, and look on it as a sort of tamasha in which they could get enjoyment out of a parade where everything goes like clockwork, where the armsdrill is precise, and where the marchpast is a good spectacle.

(c) That therefore the parade would never last more than half-an-hour.

This was a rigid promise.

(d) That (most important) the parade was for the benefit of the troops, and not just an occasion for N. C. Os. who might be so minded to gali the riflemen.

The response was most gratifying. The result, so far as getting the battalion together as a machine, fully justified the comparatively short time devoted to satisfying what had been in our particular conditions, a psychological need.

THE BRITISH ARMY OF THE FUTURE*

BY THE RIGHT HON. SIR JAMES GRIGG,

Secretary of State for War, 1942-45.

To start with, let us consider what tasks the Army of the future will have to carry out. First, there is the problem of the ground defence of Britain, including in this compendious description the Army contribution to defence against hostile aircraft. Whether the atomic bomb will make ground defences either useless or unnecessary is a matter for the prophets, but it certainly won't do so for quite a number of years to come. So we can assume that the Army will have to play a major part in national defence. But for this purpose it will not need to put all its goods in the shop window. What is required is a permanent nuclear organisation with a large number of trained men in reserve ready to take their assigned places in the organisation as soon as the need arises.

In addition to home defence, there will be a number of external liabilities. To provide garrisons for our numerous fortresses and bases abroad: to furnish our share of the occupying forces for Germany, Austria and Japan; to provide strategic reserves at one or two of the nodal points in the Imperial communicacation system; to hold at the disposal of the United Nations Council our contribution to its armed forces, remembering that the impotence of the League of Nations was due to the absence of any means of enforcing its decisions—all these involve obligations to provide soldiers.

Opinions will differ about the number of men needed, whether by way of full-time soldiers or reservists, to fulfil each of those tasks. But there can be no

doubt that the full-time requirement by itself will add up to a larger total than we have ever raised by voluntary enlistment in time of peace. We therefore reach the inescapable conclusion that compulsory national service will be necessary until the world has settled down into peaceful ways again. Moreover, compulsory national service is the simplest way of providing reserves of trained men for expanding the Army in case of emergency. On the other hand, as a good many of the tasks lie abroad, national service will not of itself suffice. We need something more than the Swiss system, and this means that our Army must contain a high-class and substantial whole-time professional element.

There are probably limits to the numbers of officers and men who can be obtained on a whole-time professional basis. The variable factors in the military structure will, therefore, be the number of men engaged on their period of compulsory service with the Army and the number who have done their service but who retain a reserve obligation. Both of these depend upon the precise scheme of national service which Parliament may be willing to enact. What is most likely to command public support is one year of universal full-time service beginning at the age of eighteen, with a subsequent annual obligation to rejoin the colours for a fortnight's, or even a month's, refresher training until the age of twenty-five.

^{*}Reproduced by courtesy of the London ' Sunday Times.'

Given, then, a supply of professional soldiers, of what for want of a better, short term we may call conscripts, and of reservists, our land forces might be organised somewhat on the following lines:

The garrison troops abroad and the United Nations' contingent must consist entirely of professional soldiers. In addition to these, we should require a number of divisions immediately ready for war and constantly at full war establishments except possibly for some of the ancillary units. These would be distributed between the strategic reserves abroad, the occupying forces and the United Kingdom. While the strategic reserves would, of course, contain no conscripts, the occupying forces—at any rate in Germany and Austria—and the home divisions could and would contain a substantial proportion of conscripts in their second six months of service.

The core of the defence against invasion would be provided by the "ready for war" divisions in the United Kingdom. To supplement them in time of actual war a larger number of cadre divisions would be required. Each of these would, so to speak, cater for a definite area, and its units would have a definite territorial connection. There would be a nucleus of professional soldiers and into the cadres would be fitted the reservists of the particular area when they come up for their annual reserve training. In these divisions would also be included what it is to be hoped would be a large number of men who would volunteer to continue their reserve obligation even after the age of twenty-five. For the reservists, compulsory or voluntary, the annual training would have to be supplemented by something on the lines of the old Territorial week-night and weekend parades.

It is a matter for consideration whether there ought not to be a nucleus Home Guard organisation for men over (say) fifty; there certainly ought to be a nucleus Auxiliary Territorial Service for women composed entirely of volunteers, and the Army Cadet Force ought to be encouraged and fitted in to the rest of the structure so as to provide an ante-room to the Army proper.

Obviously a good supply of officers is an absolute essential to any such system. This is too large a question to be dealt with fully here, but a certain number of things must be said. Certainly, we must not only recruit officers from the schools; room must be left for conscripts who have not hitherto thought of sc'-diering as a profession but who show pronounced aptitude for it during their year of service.

The second thing is that the State must be prepared to pay for good officers, though it must also be remembered that a part of Army remuneration is not subject to income-tax and that the present high rates of taxation have in any event cut down the high rewards of commercial life. Thirdly, the Army will certainly not be able to find the number of officers it requires, and provide them with a continuous and continuously advancing career between the ages of twenty and sixty. A good many of them will, therefore, have to go out in the late forties and early fifties with retired pay, which should be generous, but which cannot be generous enough to support them in the absence of other paid occupations.

If, then, the Army is to attract good officers it must provide them with a career which is varied and interesting in itself, and which, moreover, will fit them to find a ready outlet into civil life. How is this particular circle to be squared? Clearly the Cadet Colleges, the Staff College, and the other Army

teaching institutions must not only instil military lore and doctrine to the required standard but give a wide measure of general education as well. Clearly also the technical and scientific colleges must be fully up to date and at least comparable to the best universities. Knowledge of administration must be spread more widely both by precept and practice. Business concerns and the public generally learnt during the war what an extremely efficient administrative machine the Army can be, and it should no longer be difficult to persuade employers to find places for retired Army officers of middle age.

Then, again, I am in favour of planting out officers for a period in scientific or engineering concerns, in Government departments or other services—not as learners but as doers—and it would probably be well worth the money to give a good many of them a sabbatical year to study particular foreign countries. These are some of the means of ensuring that an officer is not only a good soldier but that he will, on leaving the Army, have a good market value outside.

There are other important problems which cry out for settlement, but these I can only mention summarily. The wartime system of adult education has been a great success, and something like it, though, of course, suitably adapted to meet peacetime needs and opportunities, must find a place in the post-war Army. Is it right that there should be a separate Ministry of Supply? Ought not the Army to resume control of the production of at any rate such things as tanks and guns, which have a long period of gestation? In any case, the Army must develop a scientific staff of its own of the highest order of attainments. And there is the difficult problem of keeping the equipment of the Army in step with the advance of science, while at the same time not having to replace individual items too frequently and at too great cost.

All these conundrums will soon have to be solved. The unexpectedly early collapse of Japan has made it necessary to deal with them in the next few months. However they are dealt with, it should at least be with determination to produce in peace a high-class instrument of war. It is true that in the Six Years War we produced a magnificent Army, even after twenty years of neglect, but the process was painful and expensive. It is foolish and dangerous to go on tempting Providence.

AIR/SEA RESCUE DEVICES

One of the earliest developments in rescuing ditched air crews was the "Thornaby Bag," named after R. A. F. Station Thornaby, where it was invented; it contained food and first-aid. Subsequently the "Bircham Barrel" named after R. A. F. Station Bircham Newton, proved a more robust development of this idea, and was made from a container of a 250 lb. bomb. Even more successful was the "Lindholme Dinghy", from R. A. F. Station Lindholme; this consisted of a large and well-equipped dinghy, with a string of four containers stocked with food, warm clothing and distress signals.

The greatest single development in the work of A. S. R. was the airborne lifeboat. It was first employed off the Humber, in May, 1943, when the crew of a Halifax boarded a lifeboat dropped by parachute and navigated their way towards land until picked up by launches. One of the chief advantages of the airborne lifeboat is that it enables crews to get away more quickly from an enemy coast; and it also avoids the risk of sacrificing lives in rescue attempts.

De-salting kit is a recent addition to air rescue dinghies. By using chemical re-agents a dinghy crew can now produce $4\frac{1}{2}$ pints of drinking water from equipment which takes up the space of a pint can of stored drinking water.

Other gadgets now included in dinghies are sea-dye tablets for attracting notice of search aircraft, floating knives, floating torches, water-proofed matches, and a variety of distress signals.—Official Statement from London.

THE INDIAN HISTORICAL SECTION

By "EXPERIENTIA DOCET"

IT is not an exaggeration to say that the War just ended makes a chapter in Indian history and progress on the road to national consciousness comparable with the Spanish Armada, and the Marlborough and Wellington campaigns in British History. There is material for the addition of another book to the epics of the Mahabharata, the Ramayana and the Durbar-i-Akbari.

That this has been realised, and that an effort is to be made to record the accurate history of the Indian Fighting Forces in the late War, will be welcome news both to India's fighting men and the intelligentsia among her general public. A Combined Inter-services Historical Section has been inaugurated in the War Department of the Government of India under the charge of Brigadier (retired Major-General) T.W. Corbett, C.B., M.C., and is now working in the Old Secretariat, Delhi, on the mass of material, written and pictorial, that is accumulating.

In order to ensure timely records, the Historical Section proposes to produce progressively:—

- (a) A single volume popular history or "Indian Saga" to cover generally all the main theatres and give an accurate outline account, with illustrations, of the Indian Military achievement in the War (to be published within a year);
- (b) In a couple of years or so a fuller and comprehensive popular history in two or three volumes, which will also be of value for military students;
- (c) Tactical Studies of selected battles;
- (d) A full detailed official History in several volumes to give a complete account with commentary of the operations of Indian Formations;
- (e) A series of monographs (not for publication and probably secret documents) on particular aspects of organisation, maintenance, etc., arising from war conditions, particularly in Eastern theatres.

Obviously not all of these will be of interest to the public. The monographs are not likely to be published at all. They will be of too technical a nature, but they will be of the greatest value to all who have to study such problems for the future. The fully documented official histories will also be the official reference works, and are not likely to appear for some years.

The other three sets of works, however, should satisfy immediate needs and provide a true and timely record of India's efforts during the long years of desperate struggle.

Much has been written during the past five years about the War. Apart from the official news there have been letters, reviews, anecdotes, correspondents' despatches and personal experiences, and unofficial histories and accounts of operations in the various theatres. In addition, a mass of literature has been compiled and issued from official sources either as propaganda, as aids to training or as incentive to morale. Although much of this latter material has been interesting and informative, for various obvious reasons it could not tell the whole truth.

Indeed, a great deal of what has been printed unofficially since the Press censorship was lifted, has actually been inaccurate and misleading. Even the despatches of supreme Commanders and the Commanders in the field as far back as 1940 and 1941 have not yet been published, and these will doubtless be the first official uncensored documents to give outline accounts of operations. But they, too, are in fact personal documents. They give only the narrative of a particular phase or campaign as seen through the eyes of the Commander concerned.

The time has now come when the War can be recorded without the handicap of many of the considerations of security. When all the records have been collected, compared and dissected, a sufficient perspective will have been achieved for the first official history to be compiled.

There has, however, been a certain amount of confused thought on the subject of official War Histories, and it must be admitted that both in Great Britain and in India preparations for their compilation have been tardy. In Great War I, there was no historical organisation functioning for the preservation of records, to examine controversial events in time before the memories of those who took part in them faded or they themselves died or were killed. Many were the handicaps therefore, encountered when the official histories of Great War I ultimately came to be written.

The lessons from this state of affairs were learnt in varying degree by Great Britain and the Dominions. Some of the latter sent their armies to Great War II fully equipped with field historical Sections; others, including India, moved more slowly and undertook the recording of their war effort only to a limited extent while hostililties continued. Great Britain herself waited till the War had been in progress some time before beginning a historical record of it, though some Supreme Commanders in the field built up their own historical sections from the start.

It may even be asked why, since Great Britain will deal exhaustively with the record of operations in all theatres, India should commence separate research and write a story also. Apart from the fact, already stated at the beginning of this article, that India has an epic of her own to write, there are many reasons. India's military story must be told from a different point of view—the Indian one. And it must be told in such detail as it warrants from that point of view, but which would be impracticable for inclusion in a general Empire history. It will also deal with Indian aspects of the Indian War effort, and of campaigns in which her armies were engaged that the general history could not specifically cover.

Canadians, Australians, South Africans all are writing the record of their war effort and achievements of their armies. They have been convinced that their own individualities, traditions and outlook could not be adequately treated in a history written anywhere but in their own country. How much more is this true of India! The nature, organisation and maintenance of India's fighting services are dependant upon special conditions, such as multiplicity of races and creeds, climate, economics, communications, trade, industry and numerous other important factors peculiar to India. A historian of India's military effort must be familiar with these. Justice could not be done to the performance of India's fighting men without such knowledge and familiarity with their various types, origins, and the influence of the lands from which they come.

The War just ended has been remarkable for the extent and range of India's military effort. It may well be remembered as the crucible in which Indian nationalisms for the first time were fused, and indeed India's future survival must

depend on this close fusion. Consequently the history of this War needs to be written, as far as India is concerned, with a balanced and informed judgment and circumspection as to Indian political and psychological values, as well as towards military efficiency and prowess. This will help the comradeship forged in arms to develop into a united citizenship. It will encourage the wider comradeship within the British Commonwealth that stands for the safety of India and the peace of the world.

History is a word that often suggests dull reading, a memory for dates, or a dry-as-dust discourse of events which have long been forgotten. Military history suggests something even less attractive to the lay mind. If anyone doubts this, let him test the knowledge of the average ordinary educated man regarding the major events or features of Great War I. His ignorance, not to say actual misinformation, would astonish anyone acquainted with the facts. This may be due in part to an attitude to Great War I that became almost universal on its conclusion, and which could be summed up thus;

"Thank God the War to end Wars is over; nothing like that is going to happen again in our time; let's devote ourselves to returning to civilisation and teach our children something different from War."

General lack of interest and ignorance were almost certainly the direct outcome of our failure to take up the question of a war history immediately after Great War I, and to write it in such a manner as to ensure the interest of the public as well as do justice to the men who won the war. One of the greatest predisposing factors to causing war is ignorance of past wars, their causes and effects, and lack of public interest in any form of military history. In India no complete official history of the Indian Forces and War effort in Great War I was written at all, popular or otherwise.

In regard to the War just ended, there is danger that ignorance and misinformation will be even greater as the result of the continuous flow of propaganda while hostilities lasted, and the misleading information that has appeared in print on the screen and in broadcasts, since they ceased. The History of Great War II in fact is something that, from the public point of view, needs fresh approach. People have been intimately concerned and affected by this war, and so far from desiring to let the "dead past bury its dead" are anxious to ensure against the calamity of yet a third World War. This makes the intelligentsia of today more ready to study this war and try to under its features.

The "total" nature of Great War II; the menace from the air (including the atomic bomb); the variegated and world-wide nature of operations; and the numerous and unexampled personal adventures and sacrifices, have made a deep impression on all. They should inspire something new in the way of military history, and they should be recorded in a manner that will provoke thought, study and approach to the problems of the future with eyes wide open and enlightened judgment. The field for description and discussion is unprecedented in scope and interest, and the aim must be to provide the public with a considered and reasoned account that does not seek to omit or evade the controversial or regretable.

It is the business of the Indian Historical Section to see that the story is presented in a manner that does justice to Indian and British men and women who fought and worked as comrades, to their leaders, and above all that it tells the truth.

LETTERS TO THE EDITOR

WARTIME BADGES OF THE INDIAN SOLDIER

To the Editor of the U.S.I. "Journal."

Dear Sir,

Now that security admits, I am anxious to gather information about the various badges worn by units of the Indian Army and State Troops during the period 1940-45, with a view to providing an article on the subject for circulation and record in the Journal of the U.S.I. of India—and later having a description with illustrations published in one of the British military historical magazines.

What I particularly require is notes describing badges worn by Indian other ranks in pagri, jungle hat, cap or beret which have been adapted during the war, both by old units and specially by new regiments, battalions, etc. A rough sketch, or rubbing, with notes as to metal, where and when worn, etc., is better: best of all would be a specimen of the badge (I am very willing to pay for this) which I can have photographed for publication. Title badges of new units are also of interest.

I shall be most grateful to all who care to help me in this work.

The Slate House, Sandhurst. Berks, (England) Yours faithfully. F. G. HARDEN, Major.

UNIVERSITY OFFICER TRAINING CORPS AND THE I. A.

To the Editor of the U.S.I. "Journal."

Dear Sir,

I have read with profound interest the two excellent articles by Col. D. Portway entitled "Education and Leadership in India" and "Military Training in India's Universities" and in the latter article he asks a pertinent and long overdue question: "But is it not time that the Indian Army put its house in order in respect of military training in India's Universities"? I commanded a University Training Corps and I know where the shoe pinches the Indian students and their University. In every sphere, we have had "a preponderance of promise over performance." All plans and Committee Reports either finish up in the pigeon holes of the Secretariat or the experts take such a long time to study them that they become out of date, by the time a decision is made.

There now seems to be a change in the right direction—thanks to the World War—and I earnestly request that Col. Portway be employed as Director for co-ordinating the training and other connected activities of the University Officers Training Corps in all Indian Universities. I should like him to draw up a plan for cadet training for High Schools and see it implemented. His vast experience in Great Britain and India make him the ideal person to work his own scheme in his own way to attain the object laid down by him, and both the

Indian Students and the Nation would be ever grateful to him. If he succeeds in his plans, he would be the forerunner of establishing an efficient educational cum physical scheme for the British Commonwealth of Nations and for an International system, which has become an urgent necessity for our much troubled world.

Yours sincerely, "FAIRPLAY".

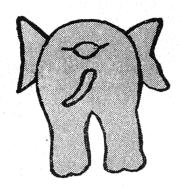
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SHOULDER FLASHES

To The Editor of the U. S. I. "Journal."

DEAR SIR,

The most unique flash of all was omitted from the collection of shoulder flashes published in your October, 1945 issue. It was the official shoulder flash of 253 L. of C. Sub-Area. Here is a drawing of it.



The sign for 4 Corps was an elephant charging. That for 253 L. of C. sub-Area, the base for 4 Corps, was as it is depicted above, and its origin will therefore be understood.

Official sanction was given to the wearing of the sign only by those persons on the War Establishment of the Sub-Area H. Q.

18A. B. P. O.

Yours sincerely, M. L. HAYNE, Brigadier.

THE FUTURE TRAINING OF OFFICERS

To The Editor of the U.S. I. "Journal."

DEAR SIR,

Lieut.-Colonel Mitchley contributed an article on this subject in a recent issue, and while it contained many points on which it is possible to agree, there were several which were open to argument.

What are the problems to be faced? (1) To make a career in the Army attractive to men of good brains and ability; (2) to train them so as to make use of those qualities; and (3) to use them to train a thoroughly efficient Army in peace, and to lead it in war.

Take the first point. Clearly, the Regimental system must go. Whether it must make room for an Infantry Regiment or for several large Regiments need not be considered, except to mention that the latter course has many advantages over the first, and still fulfils all the conditions.

Clearly, too, there must be no stagnation—but the Army has to be trained as well as its officers, and it is very much open to question whether this can be done with the plethora of courses adumbrated by Colonel Mitchley, even if the cadre of officers is greatly increased.

There can be little doubt that a great many officers will be required for seconded duties with Territorials and similar formations all over the Empire, and it is difficult to see how these duties can be performed efficiently if the tour is less than three years.

Another important aspect concerns the retiring age. The present outlook is that a fairly young retiring age will be the fate of most. That is not an encouragement, for the type of man wanted as an officer will not be content with decent pay until he is 45 and a fair pension afterwards. He wants work. He wants to be certain that he will not be on the shelf till considerably after 45 years of age. Is it not obvious that there must be a further career provided for him in the service of the country after he is that age? Why not offer a career in civil administration, welfare, or some allied branch of Government service?

These are matters which affect very considerably the method of training the officer. Few people will dispute that Sandhurst, and Woolwich, in their present form, must go. But Lieut.-Colonel Mitchley's suggestions perpetuate many of the drawbacks of the present system.

It is undoubtedly advisable for all officers to go to a University, but once there let them do the full University course and let them take any "school" for their degree. This might be subject to certain limitations; a theological degree perhaps might be excluded. But to let them go off with two years in military science will make them a separate body from the rest of the nation at much too early an age, and it would also tend to develop theory too far ahead of practice. Moreover, it will also not help to make them suitable for civil employment later.

Training in the U.T.C. is essential, but that should be followed by a course of six months or a year at a Military College where all the duties of a subaltern could be learned—law, administration, weapons, P. T. (not a specialist subject!), and a little of tactics. If this were done, a subaltern on joining would be able to pull his weight at once. But should not all branches of the service go to this College? Sappers and gunners will presumably have to take a mathematics or science degree, but they would still need other training, and they might have a longer course there for the extra work they have to do.

That covers a few points mentioned in (2), and now we come to No. 3. If the suggestions I have made are followed, a subaltern would already have done many of the courses suggested by Colonel Mitchley; he would be able to progress with his own more military training and pass on what he has learnt. But I do urge strongly that tactical training and the setting of schemes should be done by the C. O. as far as possible. It is his job, and it often makes all the difference if Tewts etc., can be gone over afterwards with troops, to show where the snags lie.

As a last suggestion, let me add that the Staff should be forbidden to draw on units to fill vacancies caused by leave, sickness or any other adversity. C. Os. should never be taken away for long periods during their tour of command to act for a Brigadier—even in the hot weather. The cadre must be sufficient for all emergencies.

South India.

Yours faithfully, "FOREST CREEK."

AN APPRECIATION OF THE INDIAN SOLDIER

To The Editor of the U.S.I. "Journal".

DEAR SIR,

To-day I am sailing for Home, but before leaving I want to send this letter of tribute to the Indian sepoy. For three and a half years I have been privileged to serve in the 4/15 Punjab Regiment, a four-class battalion; we belonged to the 7th Indian Division, and when one saw the comradeship in arms of the various-classes and creeds—well, small wonder that we never knew a reverse.

Religious sects and parties may quarrel, but the sepoy has shown that he can sink his differences and fight as an Indian for India, only remembering his class as a means of creating a healthy competitive spirit amongst the companies in his battalion. I remember a Sikh sepoy plucking a drowning P.M. out of the mud in a large pond in Bihar, Pathans carrying Sikh wounded to the Regimental Aid Post on the bullet-swept slopes of Kohima, P.Ms. bringing in a wounded Pathan in the Arakan, Sikhs of the 1/11th Sikh Regiment giving their all to break a Jap block in Sittang Bend to aid the hard-pressed Battalion of the 8th Gurkha Rifles. Much rubbish have I seen written about the Sepoy's religion. In a first-class battalion a man's religion is his private affair, but he fights and dies a proud member of the Indian Army. What an example to others!

His loyalty will always be my grandest memory. Twice during my leaves in India I have gone to villages in the Kohat and Peshawar districts. The first time it was to recruit, the second to visit relatives of killed and wounded men of the Battalion. There were no tears, no recriminations. They were very sorry; it was kismet ka bat. I met a pensioned Havildar of the Battalion; he had been wounded in the first World War, and said of his eldest son, a V.C.O. who had died of wounds at Myingyon: "It is a great honour that my son should die fighting bravely".

There in the villages it was refreshing to get back to a life where courtesy, hospitality and loyalty meant so much and where the little things of life were appreciated. The farmers were in no reserved occupation. Indeed, I marvelled that the fields ever got tilled, for the labour consisted of old men, women and children. They are the unsung heroes, for all men of military age there had joined the Army.

Back in the battalion the Indian soldier never lost his sense of humour. Unbeknown to us we had our "Old Bills". I will remember an incident in the oilfields. We had captured a dominating feature in the rear of the Jap position, but the Jap held the water. Everyone was very thirsty, and a British signaller was grumbling good humouredly with my Pathan Subedar. At last the Pathan smiled and said: "But what did you expect, Sahib? This is war; this is what you enlisted for!"

We owe the Indian soldier a great debt, which we can never repay adequately. But we can help him in many ways. Demobilisation has started and our motto must be: "Let him go to his own village in a happy frame of mind". Let us have no Treasury cheeseparing. Let us make sure he will always say: "I did a good job of work which did not go unappreciated". Increase his pension. And should India get Dominion Status ensure that his rights, as well as those of the 1914—18 pension and the 1939—45 widow, are safeguarded and not sacrificed to political interests.

Then we can rest satisfied that we did our best for the best friends we ever had in India.

Yours faithfully, "BRITISH SERVICE".

S.E.A.C.

THE ATTRACTIONS OF TASMANIA

To The Editor of the U. S. I. "Journal."

DEAR SIR,

Many officers about to retire from the Indian Army, as well as those shortly to be demobilised, may like to know something about this island, often called "this other England," for I can think of no more attractive place in which to settle.

There is plenty of room, for Tasmania has an area of about 26,000 miles, with a population of less than a quarter of a million. For those who would wish to live a life of comfort and ease it is ideal; and for those who would wish to work and assist in the development of the country there is much rich land available and untouched.

Cultivated farms can be had at prices ranging from £10 to £40 per acre, depending on their nearness to a town and the state of development and housing accommodation. Houses in towns are, as with most parts of the world, somewhat difficult to get at the moment, but a modern building of five rooms can be built for about £1,000. Our system of coinage is the same as in England, but those who wish to exchange money from England do so at an advantageous exchange rate. In other words, £100 in English money is worth £125 in Tasmanian currency.

The average price of everyday commodities can be seen from the following list: Bread, 6d. for a 2 lb. loaf; sugar, 4d. per lb.; potatoes, 1s. 2d. for 10 lbs.; butter, Is. 9d. per lb.; cheese, Is. 5d. per lb; eggs, 2s. per dozen; bacon, Is. 9d. per lb; beef, from 1s. to 1s. 7d. per lb; and milk, 1s. 7d. per quart. Meat, butter, sugar and tea are rationed but not severely, and it is not anticipated that it will continue for very long. Many peole grow their own fruit and vegetables.

Electric power is cheap, and many large industries have been established which give many openings for employment and provide an ever increasing market for homegrown foodstuffs.

Amenities of life are abundant, and within the reach of those with moderate incomes. There is a good standard and an inexpensive one—of education in our schools; and there are facilities for all kinds of games and sport. Our fishing is world famous, and a fee of £1.5s. entitles the angler to fish all the lakes or rivers in the State.

Good motor roads exist from north to south of the island and along the coast. Hotel charges range from 10s. per day in country towns to 21s. per day in some of the leading city hotels.

If any of your members feel they would like more details of life here, I shall be happy to give them any information they may ask for.

Yours faithfully,

c/o Bank of Australasia, Devonport,

Tasmania.

J. GREEN.

Mrs.

NOTES BY THE SECRETARY

Air Vice Marshal Thomas

Air Vice Marshal M. Thomas, C.S.I., C.B.E., D.F.C., A.F.C., A.O.C. Air Forces in India, and Vice-President of the United Service Institution of India, has relinquished his command and left for the United Kingdom to take up another appointment. He has taken a keen interest in the progress of this Institution since his arrival in India two years ago, and the Council is most grateful to him for the advice and assistance he has always given to the Institution.

The New Year Honours

Mr. Philip Mason, O.B.E., who received the C.I.E., in the New Year Honours List, has for several years been an elected member of the Council of the U.S. I. and also a member of the Executive Committee. His experience and assistance have always been of great value to the Institution.

The following members of the United Service Institution were awarded the honours indicated below in the New Year Honours List:

Order of the Bath.—C.B., Brigadier J. Le C. Fowle, C.I.E., Major-General R. C. McCay, C.B.E., D.S.O.

Order of the Star of India.—K.C.S.I., Sir Geoffrey P. Burton.

C.S.I.—Air Vice Marshal M. Thomas, C.B.E., D.F.C., A.F.C., R.A.F.

Order of the Indian Empire.—G.C.I.E. H. E. Sir George Cunningham, K.C.S.I., K.C.I.E., O.B.E., I.C.S., Governor of N. W. F. Province; H. E. Sir Bertrand Glancy, K.C.S.I., K.C.I.E., I.C.S., Governor of the Punjab; Major-General H. H. The Mahrajadhiraj of Patiala, G.B.E.

K.C.I.E.—E. Conran-Smith, Esq., C.S.I., C.I.E., I.C.S.; Major-General H. J. M. Cursetjee, C.S.I., D.S.O., K.H.S.; Major-General Francis I. S. Tuker, C.B., D.S.O., O.B.E.

C.I.E.—Major-General D. Beanland, O.B.E.; Lieut.-Colonel R. B. Emerson, R.E., General Manager, G. I. P. Railway; Brigadier R. L. Goode, F. F. Rifles; Philip Mason, Esq., O.B.E., I.C.S.; Brigadier B. Pennefather-Evans, O.B.E., M.C., I.A.O.C.; A. A. Phillips, Esq., V.D., Chief Controller Railway Priorities; Brigadier R. H. Stubbs, R.I.A.S.C.; Brigadier C. D. L. Turner, O.B.E., R.I.A.S.C.

Royal Victorian Order.—G.C.V.O. Lieutenant-General H. H. The Maharaja of Jammu and Kashmir, G.C.S.I., G.C.I.E.

Knighthood.—Major Thomas F. Borwick, Additional Director-General, Ordnance Factories; Major-General C. O. Harvey, Military Adviser-in-Chief, Indian States Forces.

Order of the British Empire.—C.B.E. Brigadier W. D. Edward, D.S.O., Frontier Force Rifles.

O.B.E.—Colonel E. Bradney, D.S.O.; Brigadier T. W. Boyce, M.C., M.M., 14 Punjab Regiment; Colonel M. C. T. Gompertz, R.I.A.S.C.; Colonel K. A. Gosnell, I.A.; Major P. C. Hailey, Indian Political Service; Colonel G. B. Howell, M.V.O., M.C., Secretary to H. E. Governor of Madras; Lieutenant-Colonel R. O. Jermyn, 2 Punjab Regiment; Lieutenant-Colonel G.L. Kinnear, I.E.; Lieutenant-Colonel L. Lesster, R.I.A.S.C.; Lieutenant-Colonel W. M. T. Magan; J. S. H. Shattock, Esq., M.B.E., I.C.S.; N. H. Swinstead, Esq., M.B.E.; Colonel G. G. Templer, I.A.O.C.; Colonel R. G. Williams.

M.B.E.—Lieutenant-Colonel F. T. Copeland, I.A.; Lieutenant-Colonel A. R. Kemsley, Probyn's Horse; H. T. Lane, Esq., I.C.S.; Senior Commander Dorothy M. Thomason, W. A. C. (I).

For Gallantry and Distinguished Service.

The following awards to members have been recently announced:

C.B.—Major-General A. M. S. Snelling, C.B.E.

C.B.E.—Brigadier J. F. R. Forman, Kumaon Regiment; Brigadier L. A. Harris, D.S.O., M.C., late R.A.; Colonel N. P. Townley, I.E.M.E.

O.B.E.—Lieutenant-Colonel W. S. Castle, I.E.M.E.; Lieutenant-Colonel N. J. G. Jones, 16 Punjab Regiment; Major C. W. Ridley, Central India Horse, I.A.C.; Lieutenant-Colonel L. S. Spearman, 1st Jat Regiment; and Lieutenant-Colonel M. C. Waddilove, I.A.C.

M.B.E.—Major Mohammed Abdul Latif Khan, 7 Rajput Regiment. New Members.

The following new members have been elected to membership of the Institution during the past three months:

Ballentine, Brigadier G. C.

*Balwant Singh, Major

Chakravarti, Lt. Commander A.,

R.I.N.

Cook, Major W. R. G.

Curtis, Major-General A. C., C.B.,

D.S.O., M.C., A.D.C.

Foot, A. E. Esq.

Garewal, Major H. S.

Hampton, Captain R. W.

Haq, Lieut. M. U.

Laxman Ram, Lieut.

Lowther, Brigadier A. W., C.B.E.,

D.S.O.

Mangat Rai, Lieut.-Colonel C. R.

Morada, Captain P. L.

*Nanavati, Major N. D.

*Neild, Captain F. G.

Niazi, Major N. A. K.

Niranjan Singh, Major

O'Lone, Lt.-Col. R. J.

Pace, Lieut. A. C.

*Pape, Wing Commander G. A.

Partridge, Major J. H.

Rashid, Captain N. A.

Richards, Captain P. B.

Shepherd, Rev. R. H.

Shurlock, Major T. A.

Stewart, Lieut.-Colonel G. W. F.

*Vidya Dhar Jayal, Lieut.-Colonel

D.S.O.

Walters, Major W. C.

Whitby, Lieut. R. P.

Williamson, A., Esq., C.M.G., I.C.S.

*Woods, Major B. H.

Other subscribing members who have enrolled during the past quarter $\ddot{\text{i}}$ nclude:

Asstt. Secretary, Department of Food;

Command Welfare Officer, Air Headquarters, India;

Commandant, Embarkation Headquarters, Keamari, Sind;

Officers' Mess, 2 Depot Bn., I.T.T.C., Deolali;

Officers' Mess, Transit Camp, Delhi Cantt;

Commandant, Transit Camp, Madras (3 copies);

P. C. M., Officers' Mess, I.E.M.E., Shahjahanpur;

Officers' Mess, 4 (Engrs. Bns.) Gp. I.E., Sialkot;

Secretary, R./I.E.M.E. Officers' Mess, Quetta;

Commandant, 2nd Madras Bn., U.O.T.C., Trichinopoly;

P. M. C., 5th Bn., The F. F. Regiment;

Mess Secretary, 26th Bn., The F. F. Rifles;

P. M. C., 14 Punjab Regimental Centre;

P. M. C., Regimental Centre, 10 Gurkha Rifles;

O. C., B. M. Hospital, Jullundur;

O. C., B. M. Hospital, Lucknow;

O. C., Combined Mily. Hospital, Naini Tal.

Gold Medal Essay Competition

Colonel E. C. V. Foucar has been selected by the Judges as the winner of the 1944-45 Gold Medal Essay Competition conducted by the U. S. I. of India. The judges have recommended that the Gold Medal should be awarded to Colonel Foucar for his paper, which is published elsewhere in this issue of the *Journal* under the title of "Preparedness a National Necessity."

Entries for the 1945-46 Competition must reach the Secretary by June 30, 1946. The subject selected for the next competition is: "Co-ordination and control in peace and war of the forces of all three services, British and Dominion, in the Indian Ocean and neighbouring territories."

The interdependence of the three Fighting Services, one upon another, was demonstrated time and again during the late war. The success achieved when the three have planned and operated with one object and under a unified direction has been remarkable. This has, however, tended to create a complicated system of command with large staffs.

Bearing in mind the necessity for the three Services to continue to train to operate as one whole, and the danger in peacetime of each retiring into its own watertight compartment, examine the possible ways of evolving from our own war experience a simplified system of command which will ensure the closest inter service co-ordination for the commonwealth forces in peace and in war.

A definition of the geographical scope has been left to the essayist

Full details of the rules governing the Competition will be found elsewhere in this issue.

MacGregor Memorial Medal

Recommendations for the award of the MacGregor Memorial Medal should be submitted by May 1 of each year.

The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor, who founded the United Service Institution of India. It is awarded for the best military reconnaissance or journey of exploration of the year.

The awards are made in June, and are: (a) For officers, British or Indian, silver medal, and (b) for soldiers, British or Indian, a silver medal with Rs. 100 as gratuity. For especially valuable work, a gold medal may be awarded in place of one of the silver medals, whenever the administrators of the Fund deem it desirable. The Council may also award a special additional silver medal, without gratuity, to a soldier, for specially good work.

The award of the medals is made by His Excellency the Commander-in-Chief, India, as Vice-Patron, and the Council of the United Service Institution of India, who were appointed administrators of the Fund by the MacGregor Memorial Committee.

Eligibility for the award is open to: (a) Officers and other ranks of all forces of the British Commonwealth of Nations while serving with the India Establishment, or with South East Asia Command. (b) Officers and other ranks of the Royal Indian Navy, Indian Army, Royal Indian Air Force and of the Indian States Forces, wherever serving. (The term "Indian Army" includes the Indian Auxiliary and Territorial Forces, Frontier Militia, Levies, Military Police and Military Corps under local governments.)

Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal: but, in the event of two journeys being of equal value, the man who has incurred the greater risk will be considered to have the greater claim to the award.

When the work of the year has either not been of sufficient value, or notice of it has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief in India to deserve it.

The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal. Replacements of the ribbon may be obtained on payment from the Secretary, United Service Institution of India, Simla.

Library

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Articles on matters of military, naval and air force interest are welcomed. They should not exceed 5,000 words in length, and preferably should run to 3,000 words. Contributions should be type-written, double spacing, and in view of the paper shortage, may be typed on both sides, providing a moderately thick paper is used.

• Contributors unable to submit articles already typed may send them in manuscript form, and arrangements will be made for them to be typed in Simla, the small charge being deducted from the contributor's fee. Payment is made on publication, at rates up to Rs. 150 according to the value of the contribution.

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Members also receive, post-free, each of the quarterly issues

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1. All officers of the Defence Services, whether they belong to the Imperial Forces, to forces raised by the Government of India, by an Indian State, by a British Dominion or Colony, and all gazetted officials of the Government of India or of a Provincial Government shall be entitled to become members, without ballot, on payment of the entrance fee and subscription.

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the Journals for the current year have been supplied.

10. Members are responsible that they keep the Secretary carefully posted in regard to changes of rank and address. Duplicate copies of the Journal will not be supplied free to members when the original has been posted to a member's last known address and has not been returned through the post.

11. All communications should be addressed to the Secretary, United Service Institution of India, Simla.

^{*} For the duration of the war, the entrance fee has been waived.

The Fournal

of the

United Service Enstitution of Endia

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GOLD MEDAL PRIZE ESSAY COMPETITION

The Council has selected the following subject for the Gold Medal Prize Essay Competition for 1946:

"Co-ordination and control in peace and war of the forces of all three services, British and Dominion, in the Indian Ocean and neighbouring territories."

The interdependence of the three Fighting Services, one upon another, was demonstrated time and again during the late war. The success achieved when the three have planned and operated with one object and under a unified direction has been remarkable. This has, however, tended to create a complicated system of command with large staffs.

Bearing in mind the necessity for the three Services to continue to train to operate as one whole, and the danger in peacetime of each retiring into its own watertight compartment, examine the possible ways of evolving from our own war experience a simplified system of command which will ensure the closest inter-service co-ordination for the Commonwealth forces in peace and in war.

A definition of the geographical scope has been left to the essayist to develop

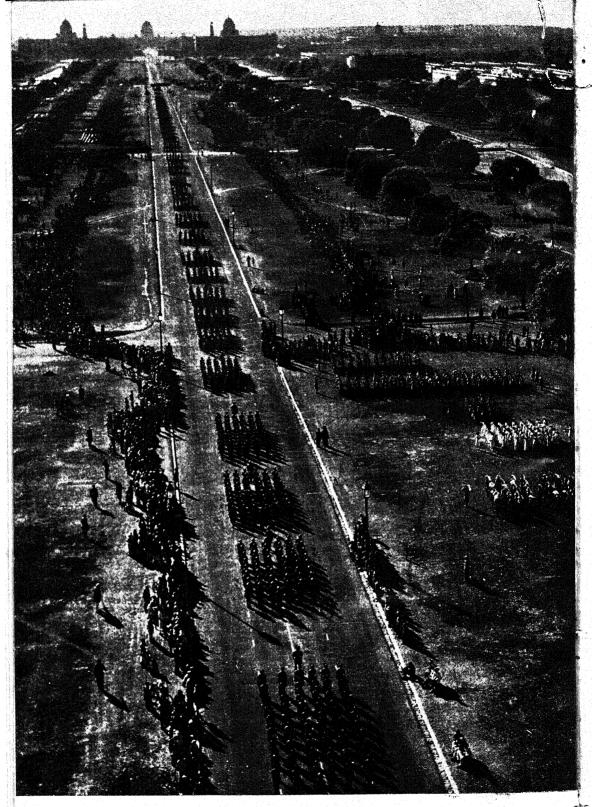
Entries are invited from all commissioned officers of His Majesty's Forces, from gazetted officers of the Civil Administration in India, and from officers of the Indian States Forces.

Essays, which should be typewritten (double spacing) and submitted in triplicate, must be received by the Secretary, United Service Institution of India, Simla, on or before June 30, 1946. In order that the anonymity of each candidate should be preserved, a motto should be written at the top of each entry. A sealed envelope, bearing on the outside the motto, and containing inside the name and address of the author of the essay, must accompany each entry.

Entries should not exceed fifteen pages (approx. 8,000 words) of the size and style of the Journal. Should any authority be quoted in the essay, the title of the work referred to should be given.

Three judges chosen by the Council will adjudicate. They may recommend a money award not exceeding Rs. 500, either in addition to, or in substitution of, the Gold Medal, and will submit their decision to the Council. The name of the successful candidate will be published in the October, 1946 issue of the Journal.

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Victory Parade in Delhi

The Journal

of the

United Scrbice Enstitution of Endia

Vol. LXXVI

APRIL, 1946

No. 323

The views expressed in this Journal are in no sense official, and the opinions of contributors in their published articles are not necessarily those of the Council of the Institution

MATTERS OF MOMENT

EW, if any, associations of men of two nations have yielded such unanimity of spirit as has the two-hundred year old British and Indian co-operation in the Indian Army. The man-bap tradition brought out the best in both officer and man; it was a link forged in war and peace, in far-

off battlefields as well as in Indian cantonments. It thrived on fair play, fidelity and singleness of heart and purpose. It was unique in the annals of military history for officers of one nation to guide, lead and retain the loyalty of men of another nation for so long, and generations of British officers who have given their lives to make the Indian Army what it is

loyalty of men of another nation for so long, and generations of British officers who have given their lives to make the Indian Army what it is can with honesty look on their handiwork not only with affection but with a deep sense of pride. In modern days the preaching of such sentiments may not be applauded. British people are not good advertisers of themselves, and the pre-war Regular Officer is no exception. But as these lines are written by one who between the Wars was an onlooker of matters military, they can be read without embarrassment by those who built and strengthened the foundations of an Army which emerged as the biggest volunteer Army of modern times. "Man-bap" tradition is a tradition which must and will live, for its essential meaning is that the officer brings to his profession that vital interest in the welfare of his men without which an Army becomes weak and inefficient.

With sudden transfers and departures in the stress and strain of war the tradition has perhaps dropped a little into the background. E.C.Os,

lacking the years of experience with Indian troops, were Its handicapped at first by ignorance of language and customs. Great but their pride in the Indian soldier quickly led them to Value see the value of such a tradition. Now the war is over and the beginnings of permanency are becoming evident, the basic loyalty between officer and man which has always been such a feature of the Indian Army is again coming to the fore. It had, and will for ever have, a tremendous value, for loyalty to one's friends is a characteristic on which Indian soldier and British officer may pride themselves. above political strife. In future, Indians It is a loyalty far will have the privilege of fostering it, and that it will lead to the same confidence and trust cannot be doubted. "Anand," in his article in our last issue, after referring with refreshing frankness to some of his fellow Indian officers, declared that among them were many who, if carefully picked, trained and guided, would be the torch-bearers of Indian aspirations. Such officers have come to the fore through their courage on the battlefield, and, stimulated by action in fighting the enemy, have shown high qualities of leadership.

Thousands of such leaders will be required in the coming years if an Army on whose record is inscribed such imperishable gallantry as that of

Finding
The Future
Leaders

the Indian Army is to maintain its high standard among the Armies of the world. How are we finding those leaders? Critics who declare that present methods are wrong may find much food for thought in the article in this issue

by Major-General Moore, who writes with authority and experience. His words will, we hope, convince the doubters that this comparatively new science of selection has and is yielding the best results. Once selected, the newcomers will receive an education and training such as no commissioned officer of any other Army receives. Leaders will also emerge from the K.G.R.I.M. Colleges, from the Boys' Companies, and from Battalions. Officers who are real leaders must be men with the spirit of endurance, dogged determination and initiative; men who have the courage to be themselves, with souls of their own, and with complete faith in their men. In the future, as in the past, such are the men who will be the Army's leaders. They may not appear as leaders at first—no "self-made" man has ever been recognised as such in his early days; he succeeds by perseverance, not by a "gift." Such men exist in India as elsewhere. They need finding, and the Defence Services are seizing every opportunity to secure them.

R EGRETTABLE as it may be, some officers who have returned to Britain on demobilisation from India write of difficulties in securing suitable employment. The main complaint is that employers are not inclined to took upon service in the Outer Empire as of much account to them in their

For Officers Going Home business. Why should this be so? The future of Britain hangs upon her success in recovering and expanding her export markets, and one would suppose that personal knowledge of those markets and their requirements would

be of inestimable value. Apparently it is not so. British manufacturers, we are told, want value for money. If that is true, and we imagine it is, officers about to leave for Home should seize every chance of increasing their "value." One subject on which most people fail, and fail lamentably, is salesmanship—not the salesmanship of the vacuum-cleaner or insurance policy type—but salesmanship of their own knowledge and ability. They are the "goods" the ex-officer from India has to sell; they are his most important assets. If he has both, his chances of selling them to a prospective employer are greatly enhanced.

Let us be frank. Shrewd business men select their executive staff with care. If a man has shown initiative in battle, can handle men with tact

Some Hints and tolerance, and possesses a knowledge of modern business practice, then he is worth employing. What, then should an officer about to be demobilised do to ensure that

he makes the best of his opportunities? Many valuable hints are contained in a letter in our "Letters to the Editor" feature elsewhere in this issue. Here are some more. One is to practise writing letters plainly. The habit of using groups of initial letters—a time-saver in wartime-must go; "in view of the fact" must give way to "as"; "on the assumption that" will become simply "if"; "notwithstanding the fact that" will be replaced by "though." And our old friend "it is for consideration whether" can deservedly disappear. Those interested in this particular subject might take as an example of clear and simple writing the Indian Penal Code. It is a model of clarity. It was written by Macaulay. A useful opening presents itself in the increasing concern large manufacturing houses are showing in the welfare of their workers, for officers haveor should have—ample experience in the handling of men, and a study of newspapers and periodicals will soon reveal to an inquiring mind the names cf firms who may be interested. . . . Many British manufacturers, owing to their pre-occupation with war work, have not been able to keep in sufficiently close touch with the Indian market, which may now require types of goods it did not want before the war. An enterprising officer before going home will watch for possible expansion of trade in one line, and approach a manufacturer at Home with the latest news of the possibility of increasing its sale in India. Business men would welcome the knowledge, and would be impressed with the enterprise of the individual who gave it.

These lines are written with the desire to help officers, especially young They will find schemes arranged, Government officers, going Home, officials to advise, and training courses organised. Much Qualifications more has been "laid on" for the demobilised officer than For was done in 1919, and the danger is that people may Success gather the impression that they will get jobs to their liking without much effort. They should not be too sanguine. Undoubtedly the best course to pursue is to improve one's knowledge during the interim period before going Home; to improve one's assets; and, thus mentally armed, to go ahead with conviction in one's ability. Success in peace, as in war, springs from initiative and hard work and the success of an officer's-or any man's-search for a post-war job depends largely on himself, his ability, his knowledge, and his salesmanship. Given those qualifi-

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cations he should be able to face the future with confidence.

AR is a sickness that affects all nations, whether victorious or vanquished, and the world food shortage is one of its consequences. The scorched-earth policy, so effective in war, has rebounded, and countries throughout the world are afflicted. Europe produced 42 million tons

of wheat before the war-last year 23 million tons; serious World droughts in the five continents during 1944-45 reduced Food harvests; and shortage of fertilisers owing to the war has Position also contributed to the present position. The world exportable surplus of wheat in June, 1943 was 46,000,000 tons; by July, 1945 it had fallen to 22,00,000 tons; in February, 1946 it was estimated at 12,000,000 tons; and the deficiency is now more than 5,000,000 tons. World consumption of rice for 1946 was estimated at 6,136,000 tons; yet the available supplies now are estimated at only 3,070,000 tons. In India cyclones, storms and droughts have all combined since the turn of the year to wreck the hopes the authorities had entertained that the country might be selfsufficient in its food resources. Failure of the early spring rains have, however, nullified those hopes, and the whole of India faces a food shortage of a most serious character.

Turn back to the war years. More than three years ago food rationing was introduced in India; in 1942-43 over a million-and-a-half people died in India was the Bengal famine. Yet while India was far from overstocked, she cut her rations and sent to Russia and other places foodstuffs she could justifiably have kept. More-over, not an enemy prisoner of war nor one of the thousands of Polish refugees in the country went short. Now India, the country which did in fact play the part of the good neighbour, is in the

worst plight of all. That India's position is being recognised was evident from the encouraging remarks of Sir Ramaswami Mudiliar who, in appealing to the United Nations Organisation for help, said that representatives of the important wheat producing lands of New Zealand, Canada and Australia had all promised to do what they could to help India. It is good news, too, that some of the huge stocks of rice held in Siam are being shipped to India, and that nearly 150,000 tons have arrived.

* *

Such is the help India is receiving in her hour of need. What is being done in India to ease the position? His Excellency The Viceroy lost no

How To Help Now time in ordering that lawns and flower gardens surrounding The Viceroy's House in Delhi should be planted with vegetables, and his practical lead should be followed by all who have even small gardens. H. E. The Com-

by all who have even small gardens. H. E. The Commander-in-Chief has urged that rigid domestic economies should be introduced in all Service households, Messes and hostels. The number of courses to be served at any one meal should be limited to not more than two, and wherever possible families should make themselves self-supporting as far as vegetables are concerned. Troops are to be employed on an intensive "Grow More Food" campaign up to three days per week. Large formations of the Defence Services have set an example by growing their own vegetables, and by rearing poultry. Knowing how vitally help is needed, they can be relied upon to play their part in easing the lot of the general population. Public gardens could be ploughed and planted with foodstuffs; ornamental fountains stopped and the water conserved; and rice omitted from the menu of all to whom it is not essential. The Cumulative effect of all this end of other measures could be substantial. Famine, if it comes, will affect all—but most tragically it will affect the poor.

** ** **

T OO seldom is public tribute paid to the self-sacrifice of those who turn to nursing for their career; and singularly little attention is given to the subject in India. Yet with the early nationalisation of India's armed forces it is a matter of first importance, for if unfortunately the country is

The Nursing Problem again drawn into war, nursing of its wounded and maimed sailors, soldiers and airmen will demand thousands of efficient and trained nurses. Where are they to come from? Nursing is not learned in a day, and unless the

from? Nursing is not learned in a day, and unless the country has trained nurses to which to turn in times of emergency many men who might otherwise have been restored to health will die. That, however, may be a narrow viewpoint. What is of greater importance is the civilian aspect, and with that thought in mind we commend attention to an article in this issue written by one who has devoted much thought to the subject. She has rightly treated the problem from the broad, all-India, angle, for every modern nation must have first-class health services if it is to advance. As our contributor points out, while Western nations

have three nurses for every doctor, India has ten doctors to every nurse, and until a steady stream of India's young women come forward to learn, train and practise it is unlikely that the health of the masses of the people will attain the high standard the India of the future will demand. Public speakers have declared that each village must have its resident nurse. That may be impossible, but it is clear that public interest and public understanding of the problem are matters which demand the serious consideration of all who have the best interests of the country and its peoples at heart.

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Members are earnestly requested to notify any change of address to the Secretary without delay. Such co-operation will not only help to ease postal traffic at a time when mail services are over-burdened, but will also ensure prompt receipt of the Journal each quarter.

SELECTION OR PERSONAL PREJUDICE

BY MAJOR-GENERAL F. M. MOORE.

"The quality of an Army is the quality of its officers".—

General Sir Claude Auchinleck.

WHEN India rules herself, her leaders must confirm the method by which officers for her Services are to be selected. The present scientific method is meeting with so much criticism that a study of Selection and an analysis of common grievances seems desirable, so that a decision will be made in the light of the best and fairest advice available.

This article presents the case for our present system, and affords our critics an opportunity of presenting theirs.

Enemies of Selection.

Selection is unpopular and always will be. Its chief critics are:-

- (a) Candidates who have been given low gradings, and their relations.
- (b) C.Os who have had their pet officers turned down.
- (c) Those who seek privilege through nepotism or hereditary right.
- (d) And last, but far the greatest, that large band of senior officers, who do not understand what scientific selection means and are "too busy" to study it; but are suspicious of anything new and are prepared to accept, as true, any derogatory rumour they hear or any excuse a failed candidate cares to produce.

We attempt to persuade candidates and their relations that it is wiser and kinder to let candidates know, when we consider them unsuited for the Army. But candidates, being human, seldom believe they are not fit for commissions and parents —will always be parents!

There are only two known forms of Selection:—(i) Examination and Personal Interview; (ii) Our present system of scientific selection.

The weaknesses of the first system are:

- (a) Candidates learn sufficient to pass an exam, by intensive study or by learning books off by heart.
 - (b) Successful candidates often have no ability to put theory into practice.
- (c) Wealthy candidates go to expert crammers, who prepare them to answer questions, with the least possible knowledge.
 - (d) Gradings awarded by personal interview are based on personal bias.
 - (a), (b) and (c) are self-explanatory, and only para (d) requires elaboration.

With the best will in the world, all human beings are biassed, because every one of us has a type we like and another type we dislike. For instance, some senior officers like the athletic type, regardless of brains; others prefer the more intellectual type, and insist that too much attention is paid to games ability. Senior officers with strong characters seldom have any use for reserved

or temperamental officers; whereas senior officers with weak characters often get the best out of shy or diffident officers, but dislike juniors with strong characters.

Quick-tempered senior officers dislike officers who express opinions is whereas placid and sympathetic senior officers like to be given ideas and often cannot see obvious weaknesses in their officers. Active and energetic senior officers dislike lethargic juniors; whereas lazy senior officers welcome brainless stooges. And so on ad finitum.

The fact is that all senior officers, especially those with personality, know what they want and are not happy unless the candidate fits in with their own particular type. Their opinions and reports are therefore always biassed, and there lies the main weakness of Selection by personal interview, unless it is backed up by scientific methods, administered by trained Selectors.

The man who stands self-condemned is he who states: "I don't care a damn about Selection. I know the type that will make a good officer and I am prepared to back my judgment against any...system". How little does he realise that he is really saying: "I know the type that suits me and no other will do"! To be fair to all types, selectors are taught to sink their own personality and are trained to judge on performance and ability, regardless of looks and personal prejudice. After all, many of our best Military leaders are no beauties!

A Personal Interview, before a board of senior officers, has the following failings:—

- (a) During the interview, one of the board must do the questioning of the candidate and his questions are based on his line of approach, which seldom, if ever, coincides with the line of approach the other members would adopt. It is too late for the other members to produce questions after the President, as the candidate has been led up one path and cannot be expected to switch to another, without a considerable interval to re-orientate himself.
- (b) Members of the board are filling other responsible jobs, and therefore have not the time to go and learn the art of investigating and assessing the respective value of merits and debits discovered in a candidate.
- (c) The President lacks experience of Selection and has no opportunity of comparing the standard of the group he is testing with previous groups or groups being tested by another President.
- (d) Some senior officers may be able to judge a candidate's present ability but, before you read further in this article, just consider how you would examine a candidate to ascertain his potentiality for the future. What would you look for and how would you assess the relative good and bad points you find? You will find the answer on page 162*.

There is no difference in principle between selection for Emergency commissions and selection for Regular commissions; but there are small differences in the method of testing. As future Selection will only be concerned with candidates for Regular commissions, the details given in this article describe the working used, when Selection boards are dealing with this type of candidate.

HISTORY OF SCIENTIFIC SELECTION.

Scientific selection was originally thought of about fifty years ago, when the Biner-Simon test of intelligence was produced, with a view to classifying

Parisian school children, for grading into classes and the award of scholarships. Since then, an immense amount of work has been done, in Austria, Canada, Germany, France, Switzerland, the U.S.A. and Great Britain, to develop methods of psychological assessment in civil life.

The Germans can justly claim to have started methodical selection for the Services. With the advent of Hitler, they developed a scientific system of assessment, which was used while their youths passed through the Hitler Youth Movement, labour camps and their period of military service. As, however, their theories included fantastic ideas on consanguinity and rights of inheritance and their methods savoured of the Gestapo, something very different was required by England.

In England, first experiments in Army selection started in 1941. By then, all the traditional sources of officer material had dried up, about 20,000 more officers were required in the next twelve months, and there was great and growing dissatisfaction at the method of selection then in force, which consisted of a 15 minute interview before a board comprised of one senior and two co-opted officers.

An experimental board was set up, in Edinburgh, in January 1942. It started training personnel for other boards in April 1942, and by November 1942 seventeen War Officer Selection Boards were in operation.

By 1943 India had learnt how ill-advised Interview boards had been in their selection of officers, by the high rate of failure among Emergency Commissioned Officers. It was decided, therefore, to introduce scientific selection, based on the English system, but adapted for Indians. Experimental work started in March 1943, and the first Indian board opened up in Dehra Dun in June that year.

So any suggestion that a "new fangled" system is being forced on India is quite incorrect.

SCIENTIFIC SELECTION.

Object and fundamental principles.—Our task is to collect evidence about a candidate's past and present performance, and to review its relevance towards predicting his future potentiality as an officer.

The fundamental principles behind our system of carrying out this task are:—

- 1. That technical tests, based on years of Psychological research and supplemented by the latest developments in psychological technique, are used to assess intelligence and personality.
- 2. That part of the assessment is made by a junior officer of proved quality, who has been trained to assess powers of leadership.
- 3. That experienced representatives of technical arms assess technical qualifications.
- 4. That a board is under command of a senior and very experienced officer, who is responsible for the final grading, having heard the verdicts of the members of his board.
- 5. That testing is carried out over a period of three days, during which everything possible is done to put candidates at their ease.

The Technical side of Selection is represented by the Intelligence tests, Personality tests and Psychiatrist's clinical interview; the Practical side by Group tests and the President's and Deputy President's interviews.

The various items of testing used in our system are:-

The C.O's Report.—This report is studied in conjunction with two exhaustive questionnaires, one designed to tell all the candidate has done in the past, and the other to assist the Psychiatrist in correlating what the candidate thinks about himself with the findings or "pointers" collected from the Psychologist's report.

The report is studied by the President, Deputy President and Psychiatrist, and due credit is given to the candidate, when they are balancing the report with the questionnaire and the results of their interviews.

Intelligence Tests. (a) The MATRIX test is used to assess the candidate's Basic intelligence. It is probably the most proven test we have got, results having been assessed on over 2,000,000 British and Indian soldiers. The common criticism that "it merely consists of fitting a missing piece into a pattern" is quite correct, but the critic should then go on to enquire why such action is a test of intelligence. The answer is that the candidate is faced with a choice of six pieces, only one of which is correct and, to select the right piece, he has to reason out why it is the right piece. Therefore it tests the power to reason, which is basic intelligence.

(b) The V.I.T. or Verbal Intelligence Test is designed to assess verbal facility, or the talent for dealing with the verbal and literary aspects of intellectual life. In addition, it goes to show the use the candidate has made of his basic intelligence by education and study. This test has also been "proved" over a very large number of British and Indian soldiers.

The Matrix, being a test of basic intelligence, is so devised that language does not enter into it. The V.I.T. does require the use of language and therefore is open to criticism. It could be produced in every language, but that would be such a vast task for India, and would necessitate such a large staff on every board to translate the answers, that the more practical solution of retaining the test in English and reducing the Norm or average mark, has been adopted and its use justified. Any criticism that the test is unfair, because it is administered in English, is incorrect. The Norm has been worked out by testing several thousand Indians and then assessing what the mark should be for each grade of intelligence, in accordance with the results obtained.

These are the two tests of intelligence, and unquestionable proof of their validity to predict what a man will be able to do in the future is available for any visitor to the Selection of Personnel Directorate, MEERUT.

Personality Tests.—Two well-known Personality tests are administered. The Word Association technique of the Swiss, Jung, and the Picture Story method (Thematic apperception) of the American, Murray. The former consists of writing immediate reactions to words, the second invites the candidate to write a few paragraphs on pictures which are displayed to him.

The answers are examined by the Psychological members of the board and are used to provide "personality pointers" for the Psychiatrist, to enable him to construct beforehand and thereby reduce the length of clinical interviews. They also aid him in proving opinions he forms during interview.

Marks are not awarded for these tests, and the criticism that candidates fail in them can only be due to a misunderstanding of their object. Two other common criticisms, that longer time should be given for the Word Association test and that candidates are unable to write their views in a foreign language, are not sustainable in the light of experience. When more time was allowed for the Word Association test, it was found that answers did not represent immediate reactions and Technical staffs find that candidates' answers in English do reveal the information required.

Visiting boards from the War Office are without Psychiatrists or Psychologists, because men of the required calibre and experience are not available. Personality tests therefore cannot be administered by these boards.

• Psychiatric Interview.—The medical science of Psychiatry has so developed that a trained Psychiatrist is able to detect those weaknesses of human character which are not noticeable when things are running smoothly, but which cause breakdowns in times of sudden stress.

The Psychiatrist's interview and the Psychological tests are designed to investigate a candidate's stability and morale in many and varied circumstances. They also give a comprehensive view of a candidate's personality and often disclose latent ability, which the President or the G.T.O. has failed to discover. This is particularly noticeable in the case of a reserved or shy candidate, who seldom gives a true picture of his ability on outdoor work, and is often misjudged by his C.O.

The Psychiatrist's job is to give the board his professional opinion on certain characteristics, and to assess the chances of their being modified by subsequent training or normal development.

He is actually the most maligned member of a board, and both C.Os and candidates are apt to blame him for the low gradings awarded. As the final grading is awarded by the President, and as results go to show that he is more lenient than the G.T.O., this opinion is quite erroneous.

Practical Tests.—These tests are carried out under the trained observation of a Group Testing Officer, whose task is to assess powers of leadership and to forecast how each candidate will adapt himself to Army life, after training and experience. It is therefore essential to understand what Leadership is, before studying this side of Selection.

This was the subject of the first job "analysis" carried out for Selection in the Services. The conclusion was that leadership is not strictly speaking a quality possessed by anyone, but rather a relationship between the leader and the led. A leader is a member of a group on whom the group itself confers certain duties and "leadership" describes the effectiveness of the way in which he fulfils those duties.

This conclusion is based on two elementary and proved facts:-

(a) That, in any social group, each member tends to find his own appropriate level and special position in the group.

(b) That every coherent group does, inevitably, throw up a leader or leaders.

Based on these facts, groups of 8—10 candidates, of approximately the same age and seniority, are formed and the G.T.O. observes each member finding his position in the group, while carrying out six practical tasks.

Amongst other things, he looks for the following:-

- Participation—How does the candidate work and co-operate with other members of the group? Does he take on the tough jobs or does he shirk work? Does he think and plan how the task should be accomplished?
- DOMINANCE—Is he accepted as a leader or does he issue orders which the other members of the group ignore? Does he gain the confidence of the others or does he put their backs up, by being arrogant, ignorant or unpleasant?
- ACCEPTABILITY—Has he a manner which gains ready acceptance from the others; do they ignore him or do they dislike but respect him? Does he help the others, or does he merely try to display his own prowess?
- COMPETENCE—Has he ability to make good suggestions and think quickly and rationally, or does his incompetence mislead and detract from the others' work? Can he use his brains, so as to apply his commonsense, in a practical manner?

It is these four assets, together with personality and intelligence, which go to make for potentiality in the future and leadership. (See * on page 158.)

Interviews.—Candidates are interviewed by the President and Deputy President as well as the Psychiatrist.

The President, a Regular officer with thirty or more years experience of the Army, having consulted the C.O's report and the Questionnaire, concentrates on investigating a candidate's education, Service history, sense of responsibility, sense of duty as an Indian citizen and his officer qualities.

The Deputy President, an Indian Regular officer, concentrates on finding out a candidate's sense of duty as an Indian, his powers of social contact with his brother officers and men, his loyalty to India and the likelihood of his proving a suitable type for a commission.

The Final Conference.—This is the climax of Selection and is held when testing has been completed and all members have written their reports.

Each member reads out the grading he suggests, and then his report, on the candidate. This is followed by a frank discussion, to clear up any doubtful points.

When he is satisfied that he is in possession of all the details he requires, the President awards the final grading and also decides into which branch of the Army the candidate should be commissioned.

Opinions often vary considerably and are difficult to balance and assess. It is therefore imperative that the President should have great experience, a detailed knowledge of young officers, and the ability to convince the members of his board that his final decision is correct, fair and in accordance with the balance of opinions expressed.

Similarly, the members of the board must remain unbiassed and openminded. They must not be obsessed by the points they have observed; but must balance them with other points brought to light by other members.

The efficiency of a board rests largely on the harmony that exists therein and boards are selected with a view to collecting a team that can work and argue together, without a clash of personalities.

COMMON CRITICISMS

- 1. Boards are unable to assess an officer's ability in three days as well as a C.O., who knows his officers.
- (a) The one asset which a C.O. can claim over a board is that he has known the officer intimately for a long period. But this is a very doubtful benefit, because the C.O. will be unduly influenced by many small incidents, to the officer's benefit, if he is the type the C.O. likes, and quite the reverse if he is the type the C.O. dislikes.

The board, on the other hand, by not knowing the officer intimately, is quite unbiassed; its final verdict is based on five different reports and therefore the officer neither gains nor suffers by personal likes or dislikes; the testing is carried out on scientific and methodical lines; it tests Intelligence and Personality, which a C.O. cannot do.

It may seem absurd to many now, but those who really understand our present methods are convinced that, some time in the future, Service heads will go to Selection for advice about senior appointments, in the same way as one goes to a doctor to cure serious illnesses now. The C.O. may be a very good untrained reporter, but members of Selection are highly trained assessors.

(b) The board does not attempt to assess a candidate's past or present military performance. It accepts the C.O's report as correct and merely reviews that performance, in so far as it is relevant towards predicting the candidate's potentiality for the future. Three days is sufficient for this.

In Canada, candidates spend two weeks before a Selection board and carry out several military tests, such as route marches and tactical exercises. This system could be adopted in India, but its advantages are doubtful. It is almost impossible to devise tactical schemes which are impartial to all types of candidates, and it is difficult to keep candidates in close enough touch, during exercises, to enable a fair comparison of their reactions and relative assets.

The question of extending the testing time to four or five days is, however, under consideration.

2. Boards vary in their standard of gradings and some are stiffer than others.

This is quite a natural supposition, unless one knows how standardisation of technique and grading is ensured.

There is a Statistical branch in the Selection of Personnel Directorate, where every form of comparison is maintained—passes and failures by classes, provinces, boards and types of test. Whenever a considerable variation is noticed, the matter is carefully investigated and action taken, if necessary.

To ensure standardisation of grading by G.T.Os, a staff officer visits boards continually, advising G.T.Os and reporting on them. Similarly, the D.S.P. visits boards, to ensure standard grading by Presidents and Deputy Presidents.

To ensure standardisation of technique, a basic series of tests is used by all boards. These tests have been proved over several thousand candidates.

A school is being opened at Meerut, at which all new members of boards will be given their initial training and at which refresher courses and demonstrations will be held.

The only other possible insurance of standardisation would be to have all boards working in close proximity to each other. In India, however, distances are so great that the cost of bringing candidates to one place would be prohibitive.

right to appeal against a War Office board grading.

In India, a candidate's grading is subject to revision every six months, for an indefinite period, in the light of a report submitted by his C.O. No candidate is failed, as he may be by a War Office board. This gives a candidate a chance to make good and is considered fairer than the War Office system. It certainly is more lenient than ending a candidate's chances, if he has failed before two boards.

4. Candidates are not informed whether they have passed or failed and therefore may lose good civil jobs, if they remain in the Army in hopes of getting a Regular commission.

This is a fair criticism, but it is unavoidable at present. Until the strength of the future Indian Army has been decided, it is not possible to estimate how many Regular officers will be required. Presumably this matter will have to remain undecided until the political situation in India has been settled and an Indian Government is in power, as it is only then that Indians can decide how much they are prepared to spend annually on the Services.

Candidates can, however, apply for civil jobs, even though they have appeared before Selection boards, and they can assess their chances of obtaining a Regular commission from the grading they have been awarded.

It is difficult to suggest any way of making this fairer, and educated young Indians are in the lucky position of being in demand for the Services, Government Civil departments and Industry, etc.

5. Candidates should be tested in their own language and not in English.

This seemed such a fair criticism that a project was carried out to

ascertain the unbiassed opinion of an unselected group of candidates.

Candidates were drawn from all parts of India, final board gradings were awarded before candidates were asked to give their opinions, the answers were anonymous, there was no means of identifying individual answers, candidates were not permitted to communicate with each other while filling in the forms, and they were assured that our one object was to ascertain their wishes.

The questions asked were:

QUESTION 1. If you had a free choice, which language would you choose to be tested in?

To help candidates, 16 Indian languages and English were suggested. QUESTION 2. If you were offered the choice of being tested in English or in Hindustani, which would you choose?

(a) For written tests; (b) for interview and group tests.

Examined on an all-India basis the answers to question 1 were as follows:

For E	nglish		• •	 76%.
,, E	Iindustani			8%.
" T	Jrdu			5%.
,, E	Iindi		• •	 3%.
,, C	ther languages	collectively	• •	 8%.
The answers	to question 2	were :-		70
To (a) For E	lnglish	# * • • • • • • • • • • • • • • • • • • •		 86%.
,, E	Iindustani			14%.
To (b) For E	lnglish		• •	84%.
	Iindustani			16%.
				/ 0

^{*}Note.—This paragraph only applies to candidates for regular commissions.

For readers who wish to study the answers in detail, three tables, giving detailed results, will be found at the end of this article.

• Table 1 shows choice of language by Provinces, from which candidates happened to come.

Table 2 shows choice by candidates' religion.

Table 3 shows choice by candidates' own native languages.

The questionnaire was given to 500 candidates. From this number, the forms of all those not of pure Indian descent and those who failed to fill in the form correctly were excluded, leaving 443 papers for the experiment.

• There proved to be such confusion of opinion among candidates as to what was meant by Hindustani, that it was decided to group all those who gave Hindustani, Urdu or Hindi as an answer to question 2 (b), together. This obviously gives the greatest possible advantage to the non-English speaking group and inflates the Hindustani percentage.

It seems quite clear that the criticism is not correct, and that Indian candidates are overwhelmingly in favour of being tested in English.

6. Form S. P. 42, the form on which C.O's report, is bad and omits many important points.

This form was designed to standardise reports and to aid C.Os, by suggesting points on which they should report.

Perhaps it is not clear to some C.Os that it is not necessary to answer questions which are obviously not applicable to the candidate on whom they are reporting. For example, there have been cases of a C.O. reporting on a candidate that "his tactical performance has been excellent", when the candidate had never served as anything other than a junior officer in a Supply Depot, and that "he is exceptionally well equipped for the technical side of his arm", when the candidate had only acted as 2nd in command of an Infantry company!

There is plenty of space, at the end of the form, for C.Os to report on any other points they consider necessary.

CONCLUSION

I have attempted to deal with Selection as fairly as possible, because I am sure that its object—Selection without personal bias—is vital.

Senior officers should attend a board, if possible. But only wrong impressions can be gained unless visitors are present throughout a complete period of testing, which takes three days. For instance, a well-known back bench Parliamentary figure attended a War Office board in England for one day and, in his speech of thanks, stated that he was so much impressed with all he had seen that he suggested the Army should adopt this method for selecting its officers. What he thought he had been watching all day remains a Government secret!

If our working can be improved, constructive criticism will be welcomed. I would remind unconstructive critics, however, that unless a better system can be produced the choice is Scientific Selection or Personal Prejudice.

TABLE I

	-sə:		Antirely free choice of lan		I	Intirely	free cho	ice of h	Entirely free choice of language percentages.	quage percentages.	ages.				Writte 2 (Written Tests $2 (a)$.	Tests & Interviews $2(b)$.	s & views
Province of Origin.	No. of candidat	Per cent.	English.	.instenbniH	Urdu.	.ibaiH	Pushto.	Punjabi.	Bengali.	Mahratti.	.limsT	.ngnleT	Canarese.	Malayalam.	English.	Hindustani.	.dsilgnA	.instenbniH
N.W.F.P.	12	- es	99	:	20	:	9	9	:	:			:	:	80	20	73	27
Punjab	103	1 83	70	12	14	4	1:	22	:	:	:		:		92	24	7.1	28
Bihar	1+1	8	57	14	7	14	:	1:	1	:	:	:	:	:	64	36	64	36
Bengal	97	10	74	107	T :	6	:	:	15	:	:	:		:	96	4	91	6
Assam	13	60	92	:	:	:	:	1 :	8	:	:	:		:	100	:	100	:
U.P		101	74	21	10	:	:	:	:	:	:	:	:	:	79	21	76	24
C.P.	17	4	71	9	9	12	:	:	:	:	:	:	:	:	77	65	11	23
Madras	87	20	83	67	:	:	:	<u>.</u> :	:	1	oc .	3	-		95	ũ	93	7
Bombay	31	7	76	60	:	ေ			:	:	:	:		:	94	9	94	9
Tavancore	53	9	69	1:	:	:	:	:		:		:	:	31	100		100	:
Miscellaneous	46	10	83	11	4	:	:	:	:		:			2	87	13	85	15
TOTAL NUMBER	443	:	337	34	23	17		က	6	-	7	3	1	10	383	09	*370	*81
TOTAL PER CENT	100		76.	00	10	က	:	-	22	:	ç1	H	•	67	86	14	84	16
Sind Rajputana	12 to	B	Baroda Orissa	F	"Miscellaneous"	neous" S E	includes of Cer Lyderab	includes the follow S. of Central India Hyderabad	includes the following numbers: S. of Central India 5 Hyderabad 6	number	s:— Mysore Coorg	ф		62 4	Coch And	Cochin Andamans		4 H

Sind Rajputana *Excludes: Tamil

TABLE II.

Candidates' Choice shown by their Religions in Percentages.

erviews 2(b).	Hindustani.	15	29		18	:	*71	16
Interviews 2(b).	English.	85	7.1	100	83	100	*370	84
Tests	Hindustani.	12	28		111	:	09	14
Written Tests 2 (a).	•dailgnA	88	72	001	68	100	383	86
	.msisysism.	δì	:	10	:	:	10	63
	Canarese.	•	:	61	:	:	1	tr.
	Telugu.		:	Ċ1	:	•	က	-
Entirely free choice of language percentages.	,limsT	63	•	c1	:		7	C3
nge perc	Mahratti.		•	:	:	:	-	tr
f langu	Bengali.	ro ,	: *	:	:	:	6	63
choice o	.idsinu¶		:	:	7	:	က	-
ly free	Pushto.	•	-	:	:	•	-	tr.
Entire	·ibniH	ĭĠ	•	:			14	60
	.ubrU	H	25	•	es	•	23	70
	.instanbniH	10	10	:	10		34	000
	English.	92	69	84	139	100	337	76
vEez.	Total percent	59	18	13	9	က	:	:
	Total number	262	80	58	28	15	443	100
	Religion.	Hinduism	Islam	Christianity	Sikhism	Parseeism	Total number	Total percentages

*Excluding Tamil.. 1; Telugu.. 1

TABLE III.
Candidates' Choice shown by their Native Languages in Percentages

	Total	Total				Enti	rely free	; choice	of lang	Entirely free choice of language percentages	centages	6			Written Tests 2(a).		(troup rests & Interviews 2 (b).	ews &
Native Language.	// птрет	Регсептаве	dailgnA	instenbniH	ubrU	ibniH	Pushto	Punjabi	Верgай	itterdeM	limsT.	пдэрэд	Canarese	Malayalam	English	Hindustani	dsilgnA	instanbniH
Hindustani .	27	9	59	37	4	:	:	:		:		:			65	35	62	38
Urdu	38	6	111	8	24	က	:	:	:	;	:	:	:	:	74	56	74	56
Hindi	26 	8	69	23	:	8	:	:	:	:	:	:	:	:	7.9	21	73	27
Pushto	6	2	1.9	:	22	:	11	:	:		<u> </u> :	:	:	:	78	22	28	22
Puniahi	84	19	717	12	12	2		8	:	:	:	:	:	<u>. </u>	78	22	74	56
Bengali	. 56	13	·#	62	:	6	:		16	:	:	1 :		:	95	ō	91	8
Mahratti	28	9	88	:	:	F	:	:	:	4		:	:	:	68	11	68	11
Tamil	07	6.	80	:	c1	:	:	:	:	:	18	:	:	:	86	23	95	5
Telugn	22	5	7.7	14	:	:	:	:	:	:	:	6	÷	:	98	14	98	14
Malayalam	55	12	88			1		:	:	:	:	:	:	20	100	:	100	:
sn	49	F	94	67	:	:			:	:	:	67	¢1	:	86	C1	88	61
Total number .	443	:	337	34	23	14	-	::	6	1	1	က	7	10	383	09	*370	*17
Total percentage .	100	<u> </u> :	76	80	5	က	tr	-	22	tr	61	7	tr.	63	98	14	84	16
Canarese Coorgi	10		Sindhi Konkani		Note.—Miscellaneous includes the following: 3 Gujerati 1 Assamese *Excludes* Tamil 1; Telugu	cellaneo Gru Ass	neous includ Gujerati Assamese Tamil 1	ides the	following: 11 7 Telugu	ng:— Nepali Bihari gu 1	ii i	c1 01		Orriya Konnada	aba ada	1-61		

MALAYA CAMPAIGN: THE FIRST AND LAST WEEKS

BY MAJOR J. WILSON STEPHENS.

THE FIRST WEEK

Wagon, Rifleman Pudbir Pun at the wheel, moved off on the hundred and ninety mile drive to Brigade Headquarters at Ipoh.

I had arrived at Sungei Patani the previous day as Staff Captain to a Gurkha Brigade not long out from India. War with Japan seemed imminent. Already we had received the various code words denoting the first three stages of readiness, and I had been sent to Divisional Headquarters at Sungei Patani to co-ordinate certain rail moves and discuss other "Q" matters.

Talk at H. Q. had been of our planned advance into Thailand (should we be called to their aid), and of the scheme which would launch the Division across the border to assist the Thais in preventing any hostile landing in their country. We were all optimistic, certain that, with our superior aircraft, and the naval support of the PRINCE OF WALES and the REPULSE, we should be a match for the Nips. Eagerly we waited.

Work over, I had been asked to lunch with a planter acquaintance, a soldier of the last war, now once again in uniform. He and his wife had given me beer in their little 'bar' followed by lunch. Now I was on my way back to Brigade and intended to call in at Taiping where one of our battalions, the 109th, was stationed. I would give them final instructions as to moves should the balloon go up.

At Taiping I found the C. O. in conference with his officers, and gave him the latest orders and amendments from Division. My arrival was opportune as, during my drive down, the code word for the fourth stage of readiness had been received from Ipoh. The battalion was now at its war posts. War diaries had been opened; full precautions taken. All that remained was to wait for the starting word.

As we talked the telephone on the C. O's table rang. "Hullo? Oh! it's you, Bob, is it? Yes, we've just got the final details from Jack. He's here on his way back to you. Want to speak to him?" He handed the receiver over to me. It was the Brigade Major speaking from Ipoh, and he told me to hurry back to Headquarters.

I wondered as I sped along how much longer we would be driving with full headlights. Where, were it to come off, would this campaign lead us? Of course we should beat the Nips; that was a foregone conclusion. I hoped that what I had heard of our air strength was correct. We should need it all. It was with feelings of considerable excitement that, on arrival at Ipoh, I garaged the Station Wagon and walked over to the Mess.

Except for the B. M. this was empty; the rest of the staff were at work in the lighted offices. There was an unmistakable air of tension. "Hullo, Jack" he greeted me. "Glad you thought to look in at the 109th. Saves a lot of trouble" and we got down to shop which kept me at my office table until well into the night.

Next morning the Brigadier, himself the ex-C.O. of a famous Gurkha battalion, called a conference. This included the C. Os of the three battalions; the C.O. of an Australian Transport Unit; and an officer from the local Volunteers. Everything for the projected operation of the final scheme was discussed. All said that every precaution had been taken, every detail arranged. All that remained was to wait.

Just before mid-day a message arrived calling me back to Sungei Patani. I was ordered to report to the D. A. A. G. with my kit at Field Service scale. This must be the beginning I thought to myself. A quick lunch, and battle bowler on my head, kukri and pistol by my side, I took my seat once more in the wagon. The Quartermasters from the two battalions in Ipoh who were to accompany me were waiting in their trucks; the third we were to pick up at Taiping on the way through. . .

Sungei Patani again. We were given orders to be prepared to move at a moments' notice. I was told off to form part of the Divisional Recce party which was to move to our destination across the border on receipt of the final word.

Dinner in an atmosphere of hushed expectancy. Sleep. Hardly had my head touched the pillow when I was awoken by one of the G.3s. and told to get packed. Outside it was raining. What's in the air? I wondered as, seated once more in my Station wagon, I waited. Was the final word through? An officer passed. "Hi! What's the news?" I shouted impatiently. "Are we off?" "No, not yet" came the answer. "Something seems to have gone wrong. The Japs have landed at Kota Bahru and we're waiting for orders. Plans have to be changed. But be ready to move at a moments' notice just the same" and he went off into the rain and the gloom of the rubber trees.

So the little devils had landed. What had we at Kota Bahru I wondered. Enough to deal with them no doubt. Would this mean that we should not cross the border? Must do, I supposed, now that the enemy were on our flank. What a party! With these and a thousand other speculations I whiled away the time until dawn. At 0830 hrs. I was back in my wagon. Overhead I heard the drone of aircraft followed by the crump crump of stick after stick of bombs. The whistles blew for the first time in earnest. The war was on! We were still waiting for orders.

Lunch in the Mess, now packed up and ready to move. A Major of the U.S. Army on a visit to Headquarters walked up and down the long room rubbing his hands. "This is the day I've been waiting for, for years" he said. The rest of us argued as to what our action would be or listened to the hourly broadcast on the radio. As I stood in the slit trench watching the twenty-seven Jap bombers unloading their eggs on the Sungei Patani aerodrome someone had said impatiently that he wanted to see a dog fight. I had told him not to worry; "You'll see plenty in the course of the next few days" I said. We were all convinced that that indeed would be the case. Little did we realise that the aerodromes at both Sungei Patani and Alor Star would be evacuated by the next day.

Orders at last. The Divisional Recce party was to move to Alor Star under orders of the D. A. A. G. He and I went off to our waiting vehicles and headed the column up north. We arrived at 1600 hrs. and the D. A. A. G. at once got down to quartering. Everything there was much as usual. Houses were still inhabited by their owners and we talked to men and their wives and

told them that we should have to use their homes as billets and offices. A nurse with two children in her pram took the evening air, unconcerned.

I was told that my Brigade would arrive at Alor Star early the next morning and that it would move to a place by the name of Tanjong Pau, seven miles forward of Alor Star and close to Jitra. Accordingly I said good-bye to the D. A. A. G. and drove on up the road past the wreck-scattered, pock-marked Alor Star aerodrome and on to the little village of Tanjong Pau. There I made a rapid reconnaissance for Brigade Headquarters and the 'B' echelons of my units. The harbour areas for transport had to be located under cover of the rubber trees, and in the failing light and the pouring rain it was no easy task. Finished, I returned to Alor Star railway station, at 2200 hours there to meet my three quartermasters.

Inside the station I showed them their areas on the map. A cup of tea, and I returned to Tanjong Pau so that I might be on the spot to make a further recce at first light on the following morning. I looked around for somewhere to spend the night and eventually found a Chinese who said that he would willingly give me a room in his house. These Chinese, both throughout the campaign and later when we were prisoners, were to give us all the assistance in their power. At the risk of torture and death they gave succour to our jungle-lost men, helping them in every conceivable way, and it is impossible to say enough in their praise.

Next morning I met the battalions as they came up. One battalion had been left behind at Sungei Patani to undertake anti-paratroop duties. The Brigadier and Brigade Major were in great form, as were we all now that we were to see some action.

As yet I had no clear picture of what was going on. I knew that there were two Brigades in front of us and that the advanced troops were already on the Malay-Thailand frontier. I figured that the Japs who had landed at Kota Bahru would be dealt with independently, while our force would take on those now said to be landing at Singgora in Thailand. We would go forward, I thought, on a modified edition of the old scheme and push them out. We were not to hear for some time to come of the sinking of the Prince of Wales and the Refulse.

Meanwhile, Brigade H.Q. had begun to function. The Brigade Signal Section had a line out to Division at Alor Star and others to the two battalions now forward of us in the vicinity of Jitra. As duty officer I was up most of the night taking calls. All was quiet.

Early the following morning the Brigadier and Brigade Major went up to contact the forward troops. Distant gunfire could be heard from in front of Jitra. Jap recce planes came over and a formation of heavy bombers went unmolested on their way inland. So far we had seen nothing of our own air. Little news came from the front. I spent the day answering calls for the absent Brigade Major and visiting the battalions to see to their requirements. None of us were yet certain of what we were in for. All of us talked of seeing something of our planes; wondered where they were; forward we surmised, bombing the Nips now landing at Singgora. The day was uneventful.

By evening the succeeding day the situation had altered considerably. The attack came suddenly and without warning. Headed by Medium and Light Tanks and followed by Motorised Infantry the Japs burst upon our forward troops catching them, so I learnt later, as they were moving back to take up their positions in the Jitra Line. Firing indiscriminately and with all they had

they came down the road and there was nothing to stop them. It is probable that they would have broken through to Alor Star and further had not a Havildar Major of the 101st Gurkha Rifles kept his head. Hearing the tanks approaching, this N.C.O. armed with an anti-tank rifle, took up an exposed position by the side of the road. He scored a bulls-eye on the leading tank and caused it to swerve, effectively blocking the road. The two following, trying to nose their way around their stricken leader, met the same fate. The situation in front of Jitra was, for the time being, saved. This N.C.O. was wounded and captured but managed to make his escape. He was subsequently awarded the Indian Order of Merit.

This determined action on the part of the enemy succeeded in cutting off a considerable portion of our forward troops from the remainder of their Brigade. Included in these was the Brigadier who, at the time, was forward making a reconnaissance. It was not until the next day that this officer, who meanwhile had been wounded, made his way back to his Headquarters.

My Brigadier was therefore called up to take over command of the whole formation now combined into one Brigade. The Brigade Major and I were left behind with the rest of the Brigade Staff but no units, the 109th having come under Divisional control, while the 100th and the 102nd were forward and in action. "This", I said to Bob, "is a funny state of affairs. A complete Brigade Staff and nothing to command except the Employment Platoon." However, it was not to last for long.

All that night the guns were in action, closer now, and it was obvious that the Japs were pushing us back. We at Brigade Headquarters were undisturbed. Most of us had a full night's rest; the last we were to get for many weeks to come.

At first light the Brigade Major went forward, and, on his return, I went up to see what was afoot and to try and get in touch with our battalions. I drove to where I knew the Headquarters of the 102nd to be, in the rubber trees by the side of the road. There I heard that the battle was raging to our front and that the 101st had been repeatedly surrounded and overrun. As my informant spoke, an officer of the 101st came towards us. He was dazed and a little incoherent. He said that he and his company had been outnumbered and surrounded time and again and that he thought that most of his battalion had been lost. We gave him strong tea laced with whisky, for he was near exhaustion, and, having ordered him to rest before attempting to rejoin his battalion, I went forward through the rubber trees to try and find my Brigadier.

Him I found almost as exhausted, and with reason. He had been hard at it ever since he had left us, fighting incessantly and with no time for food or drink. He said that the Brigade Major and Staff Captain of the formation he had so suddenly been told to take over were at the end of their tether, and that they must be given a rest; Bob and I were to come up with our Brigade Staff and take over from them.

I left at once, trying to remember how the other Brigade was composed. Two British units; two Indian, and two of my own Gurkhas, and Lord knows how many Gunners and Signals, all of whom I should have to ration and keep supplied with ammunition.

As I came to the 102nd's mess truck I stopped. Five, planes passed overhead, going in the direction of the enemy, and a young officer recently out from England shouted "Spitfires." "Are you sure?" I asked him. "Certain", he replied, "I've seen enough at home to know a Spitfire when I see one."

Turning to the men "Those were our 'planes" I said. "Our very best. Now you'll see the sparks fly. We'll clear these Japs out of the air in no time." The men gave a cheer. It was obvious that, like us, they had been wondering what had become of the R.A.F. they had heard so much about. That those 'planes were in fact Japanese fighters and not Spitfires and that we were never once to see our own 'planes over us we were not as yet to know. Later, when the end came, that was to be amongst my most bitter memories. That in all faith I had promised the men that they would see our 'planes clear the skies of the Jap, and that I had let them down. None of us knew the real situation. We did not know that the powers-that-be had decided that they were unable to spare for Malaya aircraft so badly needed elsewhere and without which we were to fight blind.

I returned quickly to Tanjong Pau to pass on my Brigadier's orders to the Brigade Major. We moved forward just before dusk to the Jitra position. Headquarters was where I had left it in the rubber trees, dark and gloomy. On all sides gunfire was continuous, and the spit of rifle and light-machine gun fire sounded, getting nearer. As we arrived the heavy artillery from up in front came back into new positions in our rear, the noise of their wheels adding to the din.

Dark came on. In the Brigade Office the Brigadier and Brigade Major poured over maps while I talked with the Staff Captain of the other Brigade before he went back to rest, trying to find out how his regiments stood for food and ammunition. Communication forward was by now almost non-existant; the lines were continually cut by shell fire.

The noise of battle came closer. Now everything seemed to be firing at once; rifles, light-automatics, mortars and guns firing without ceasing. What was that! I pulled out my pistol and turned on my heel. Crack—crack crack—crack. Behind me, then in front, then to one side. What the devil! Were the Nips in amongst us already? I was to get to know these in time and to ignore them. Chinese crackers we called them, part of the Jap's idea of a war of nerves, and indeed to begin with they were most effective and confusing.

Returning to the Headquarter hut, I found that the Signal officer had been sent forward to lay a line to one of the British units and that he had not returned. He was never to return, nor was the line ever laid. Now the noise was lessening and a lull set in. We took the opportunity to try and get a little rest. The Brigade Major of the other Brigade talked the talk of the utterly exhausted. He said that he could not sleep and saying it fell into a heavy doze. I had just settled myself, pistol handy by my side, to get what sleep I might when a Motor Contact Officer came through the door with orders from Division.

Out came the map, marked up to date by the Brigade Intelligence Officer. "—th Brigade will withdraw to a position at—by—hrs." We should have to get a move on! The Brigadier, Brigade Major and myself went into conference. Unit commanders were sent for; there would be no time to get out written orders. "The first thing is to get all 'B' echelons out and away to their new positions, Jack." Followed by orders and where I was to go.

Outside it was raining again and the noise was deafening; the enemy were very close. "Pudbir" I yelled "Start up." The battle of Jitra was in full swing. Every firearm in the universe seemed to have a permanent finger on its trigger, I dragged my wagon out of the mud and darkness of the rubber trees

on to the tarmac. A mortar shell exploded close by; a splinter dented the bonnet. The whine of shells was in the air and the flash of our field guns blinded me.

So began the weary retreat down the Malay Peninsular. From the fourth state of preparedness until the night of December 12/13; the first of ten weeks of prolonged rearguard fighting destined to end so tragically on February 15, 1942 on Singapore Island.

I drove off through the darkness and din to find the transport and take it into harbour south of Alor Star.

THE LAST WEEK

My Brigade, now sadly depleted and exhausted, was back on Singapore Island. For eight weeks they had fought almost without ceasing, certainly they had had no more than three or four days respite out of contact with the enemy. For days on end they had been short of rations, soaked, and with no change of clothes. Not once had they been relieved by fresh troops; not once had they seen our own aircraft. The Japs had done what they liked in the skies; dive bombing and machine gunning to their heart's content. At one period the Brigade had numbered only eight hundred rifles; many had been unavoidably left behind in the jungle, and the battles of Gunun and Slim River had taken their toll. The two Indian Divisions together with the rest of the army had crossed the Causeway on to the Island on February 1 and the Brigade was now in position in and around the famous Naval Base facing the Straits of Johore.

For myself, I had joined a Reinforcement Camp. Bob had been killed at Gurun on December 15, and I had taken his place as Brigade Major. Later, my Brigadier had gone to another appointment and, just before we left the mainland, I had been relieved and was now waiting for a ship to take me back to my regiment.

It had been hard to leave the men. I had seen all the fighting with them and had realised the honour it had been to serve with those three Gurkha Regiments. Now, however, I was impatient to get back to my own, and I hoped that I should soon be lucky enough to go into battle with them in some other theatre. As yet I had received no posting orders, and it was beginning to look now as if I never would.

The Japs had landed successfully on the Island two days ago and even now, as I stood in front of the temporary Mess of the Indian Reinforcement Camp at Pasir Ris, I could hear their mortar shells landing on the coast. From close behind me our artillery was firing at their positions on the mainland.

I was waiting for Howard, 2nd in command of the camp. We had been ordered from Pasir Ris to another, more central, site near Alexandra road, and he had gone over to make a preliminary reconnaissance. The men of the camp had already left for the twenty-three mile march, and I was alone except for servants and baggage.

Sitting on a bedding roll, not mine, for I had lost three kits in the last eight weeks and now possessed only what I stood up in, I was thinking of the retreat and trying to single out one day from another. An impossible task, I decided, for latterly we had all been so fatigued that we had fallen asleep at conferences, while we ate, and even at the wheels of our trucks. Since our arrival on the mainland I had been able to make up some leeway, though at first sleep

had not come easily by reason of the incessant round of thoughts and conjectures that circled in my head.

What was to be the end? The enemy had gained a firm foothold on the Island and, although we had a new division lately arrived from England, it seemed that we could not hold them. If reports were true we were retiring on Singapore from the north-west of the Island; a repetition of what had happened on the mainland. Not a bright future, I felt, but for all that I felt sure that we should eventually push them back again. Surely both men and 'planes must be on their way out to us?

General Wavell was in Singapore to-day, and his presence alone was worth a lot to us; at least he would know how things were and would do all he could to help. No, it was not so bad, I decided, as I lit a cigarette. We'd been in stickier places than this and got away with it. The trouble was that I was feeling out of it. I wanted to be somewhere where I could do something. In the distance I heard the sound of a car engine and, getting up, I went to meet Howard.

"Well, what's it like," I asked. "Pretty frightful", he answered. "A lot of evacuee huts and nothing much else. Still, any port in a storm. You ready? Right. Let's be going." And having bundled the remains of his kit into the car we set off for Alexandra road.

Dawn had broken. We ran down the coastal road through Changi village and barracks. The sky was clear and the sea sparkled in the early morning sun, the palm trees waved and nodded in the off-shore breeze. It seemed absurd that, within a few miles of us, a life and death struggle was in desperate progress. Past the Civil Airport, where there was evidence of bombing; past Raffles Hotel, and on through Singapore. Troops were everywhere. M. T. of every description moved towards the front.

At our destination we found the rest of the camp staff. Howard left me and went off to give a hand in the allotting of accommodation. It seemed to me that, for a reinforcement camp, we were very much in the centre of things. I could hear the guns forward of us and, to my battle-wise eyes, everything indicated that we were close to the main scene of operations. Well, it was none of my business. All I wanted was, if possible, to get back to my Brigade in the Naval Base or wherever they now were.

The rest of the day passed in getting the men settled in and drawing rations. Mostly I was left to my own devices. In the evening we forgathered. Howard and his two dogs; the C. O. and his Adjutant, and another Lieut.-Colonel, at present without a command and, like myself, awaiting posting orders. We discussed the problematical future. Howard worried about his dogs and wondered if he should put them down. I felt exasperated that, with the experience I had gained up-country, I was sitting here kicking my heels.

Next morning I was up early and went out on to the main road. Here was great activity. Staff cars and lorries drove towards the front and from the driver of an ambulance coming from the opposite direction I learnt that we were holding with difficulty.

On arrival back in the camp I was told that orders had been received that all fighting troops on the strength were to be sent to the neighbourhood of the Tanglin golf course and that the unemployed Lieut.-Colonel, Lake, was to command them. I was to go as his second-in-command and Adjutant.

In our area I got down to organising the men into companies and appointed company commanders, a quartermaster and a signal officer. We had with us a hundred and thirty reinforcements of the 102nd Gurkha Rifles, a first-class bunch of men and commanded by an officer who knew both his job and the men. Here anyway was a stout little fighting force. Of the rest, there was a mixture of all the Indian units in Malay, all good, but with new and inexperienced officers who, for the most part, could not speak the language. However, all were eager to do their very best and to make a show of it.

We looked around for a house that we might use as a battalion headquarters and settled upon a large private hotel, the owner still in residence though about to move in to Singapore. I promised him that, so far as I could see to it, his property would be respected and that there would be no looting.

That evening we moved in, the company commanders choosing billets in their own areas. The battalion was spread out in a large semi-circle around the golf links. As yet we did not know under whose command we came nor had we any information as regards the units on our flanks, and it was not until the following day that an Intelligence Officer arrived and told us that we were to form part of the....st Brigade. He said that we were to be prepared to move up north along the railway line to fill a gap between two of the forward battalions of the Brigade. To a normal battalion this little operation would have presented no difficulties, but to us it presented something of a problem as we had nothing in the way of signal equipment nor had we any vehicles or even motor cycles. Lake and I were relieved, therefore, when later the order was called off.

On the morning of February 13, things began to happen. Gunfire could be seen to our front and the Australian artillery were in position close to our most forward companies. Hostile bombing increased in volume; bombers of all descriptions were constantly in the air, and the noise of ack ack and Bofors was incessant. Snipers from the nearby houses began to put in an unwelcome appearance, the 'tock-dong' of individual bullets punctuating the steady roar of the bigger stuff.

At mid-day we received a General Order of the Day issued jointly by General Wavell and the Commander-in-Chief in Malaya. The former told us that we were to fight to the last man and the last round, that the loss of the Island would be a major disaster. The latter added his remarks in the same strain. It was clear that we were up against it, though at no time did the thought that we should have to surrender enter our heads. Something we were sure would happen. Rumours were persistent. One said that the Americans had landed at Penang, another that General Wavell had promised that we should be back on the mainland in four days time.

That afternoon the Hospital in our area received a direct hit from a stick of heavy bombs and was set alight. The patients, wrapped in blankets, made their way across the links to the main road, hoping for lifts to Singapore. There was nothing we could do for them.

Later an Australian Colonel and his Adjutant visited us. He told us that we were now to come under command of the A.I.F., and that the Brigadier commanding the sector ordered us to take up a position forward of where we now were by first light next morning. We would be flanked on either side by units of the A.I.F. The C.O. and I made our reconnaissance and issued our orders,

At dark that night the artillery all over the Island woke into noisy life. Lake and I were trying to get a little rest. Fully dressed we lay and listened to the incessant roar of the guns. "No sleep for us to-night, sir" I shouted. He said later that, almost at once, I added my snores to the orchestra of sound.

We were up well before dawn. Neither of us had had much sleep, and the whole earth still shook with the weight of the bombardment. Soon we were in our new positions. This was open country, a change from the rubber trees and jungle in which, up until now, I had fought. We moved headquarters to another house close to a heavy battery of ack ack; an unfortunate choice, but at the time we had no chance to look elsewhere. By now we had discovered that we were part of a salient and that the Japs were pressing forward to Singapore on both sides of us. Hostile aircraft and guns paid us constant attention, and we were forced into slit trenches. That night the oil installations to our front were set alight, brightening the sky for miles around.

The morning of the 15th came in with the roar of artillery. From the first it was evident that the Japs intended to make a big effort to get into Singapore. Parties of the enemy had been reported on our front. Shelling came from both flanks; dive bombers machined us individually and collectively; casualties began to occur.

"This looks like the big thing", I said to Lake. "Yes", he replied as, with one accord, we jumped into a trench to avoid the unwelcome attention of a diving 'plane whose pilot we could see with the greatest ease. "I think I'll join the Gurkha Company if you don't mind, sir", I said. "I'd like to be with them if it's going to come to a hand to hand show." Even now I felt we should see the Japs off. It seemed to be mainly a matter of hanging on.

What was this? An Australian runner doubled across to where we stood, dropped into cover, and handed a note to the C.O. Lake glanced at it, frowned and then went white. "What on earth!" he exclaimed and then read it again and passed it to me. It was from the Australian unit on our right.

off we are to fight to the last man "That's O.K. I said to myself. Hullo! What's this? ". . . . the white flag has gone forward to offer unconditional surrender. The answer is expected at 16.30 hrs. If it is accepted, troops will stand by to lay down their arms. If not, then we shall continue to fight." The message ended with a personal note to Lake asking him to keep the news to himself until official news was received as to the Japanese reactions.

My head swam. Surrender! It was out of the question, surely? Lake and I stared at one another in silence, the full implication of the word slowly dawning in our minds. Unconditional Surrender! That would mean that the war, so far as we were concerned, would be over; all that fighting up-country to no avail. Be prepared to lay down your arms! There was something shameful in the very thought. We should be Prisoners of War! "This can't be true", I said. "There must be a mistake somewhere. Damn it, we've still got plenty of troops and masses of artillery." "I know", answered Lake, and relapsed into thoughtful silence.

It was beyond me. True, I had realised that we were indeed up against it; that General Wavell's Order of the Day had been in real earnest and not just a timely 'fillip' to the troops. I was, like everyone else, quite prepared to carry out the order to the full. In my mind I had seen the possibility of something on the lines of another Dunkirk; fighting to the sea perhaps, and then trying to

make a get-away. There had always been the conviction that the tide would turn. I felt cheated somehow, on unfamiliar ground.

It was not until the morning of February 16 that we received confirmation that the surrender had been accepted. The night had been uneventful and without noise. The men and officers were puzzled, for Lake had not passed on the news. It came in the form of an order from A. I. F. Headquarters. We were to lay down our arms, ammunition and equipment forthwith, and the C.O. and I were to report to General Gordon-Bennett at his position near the Tanglin golf course.

I called up Company Commanders and the C.O. spoke to them. "Gentlemen. We have surrendered to the Japanese unconditionally and we are now Prisoners of War. I do not know the reason for this action, but it will, of course, be adequate. Fall in your companies and disarm yourselves and your men. I and the Adjutant are going to A.I.F. Headquarters for a conference. There is nothing more that I can say, gentlemen, but try and make the men understand that we have not just packed up and that this is an honourable surrender. Thank you." With strained faces the young officers turned on their heels. "Come on, Jack. Let's get along" and we started off for the conference.

En route we called in for the Australian battalion commander on our right who, saying little, gave us a bite of food before taking us off in his car. At A.I.F. Headquarters there was a feeling of anti-climax; to talk in an ordinary voice seemed, somehow, out of place. I felt as if I was entering a Church.

For myself, I had by now accepted the position and I was trying to work out what would be the best thing for us to do. Here we were, some five hundred Gurkha and Indian troops, likely to be made prisoners with the Aussies. From the point of view of rations it would be much more suitable were we able to rejoin our own Corps and go wherever we were destined for with them. I got on to the 'phone and was promised that orders would be got out to us.

Returned to the battalion, we found rifles and equipment laid out on the ground. The men were silent. The Subedar of the Gurkha company asked me what it all meant. He was obviously deeply upset and had to make an effort to control himself I did my best to explain the circumstances of the surrender to him. I told him what we had just been told at the conference. The Japs had the water supply and the hospitals in Singapore were full to overflowing. We were surrendering because of the civil population. "There are many of us Gurkhas here yet untried, Sahib", he said. "Could we not have gone on? We are not afraid of death." I felt as he did and told him so, but added that orders had to be obeyed and that we must carry on accordingly. He shook his head sadly and went off to explain, exactly as I had done to him, for I listened, the situation to the men.

A message arrived from Indian Corps Headquarters. We were to march forthwith to join the rest of the reinforcement camp at Raffles Square, where we would receive further orders. We were to take our rifles, ammunition and equipment with us.

Armed and equipped once more, we formed up on the road in column of threes. Lake said a word to the men. "... but let us go through the town like the undefeated men we are, marching as you would on your own parade grounds." It was essential to try to soften the blow to their pride. Indeed we all needed something of the sort.

"No. 1 Company . . . By the right . . . QUICK—MARCH!" We moved off with a swing, the men's heads held high. It was all somehow like a story in a book. It was one of those occasions when one feels this can happen to other people but surely not to me? Even now I had the sensation of being an onlooker.

Down Orchard Road. We had three miles to march to our destination. Everywhere there was evidence of shelling and bombing. We passed men and officers of other units standing about with a lost look on their faces. Civilian cars went by with little Japanese flags in front or hanging out of the window. As we entered the city I saw a party of Jap troops by the side of the road; this was a nightmare—no less. A car with a news camera mounted in the back came towards us, stopped, and began to make a film for the Tokio cinemas. They began with Lake and myself and I thought I had plumbed the depths. However, we were no bedraggled crowd. The cinema audience would see no signs of a conquered foe when this was released.

Arriving at Raffles Square, Lake handed over the men to the C.O. of the camp, and together we walked over to Robinson's—a big general store—where we had been told to assemble. The men had been put into a building on the other side of the Square.

That evening the Japs arrived and we were disarmed; the weapons were loaded into trucks and taken away. Later I walked around outside. Civilians were still in evidence. I met the owner of the Private Hotel we had taken over on the 11th for our battalion headquarters, and he gave me a welcome cup of tea in a room above the Bank of Indo-China. It was not until I walked out of this building that I noticed that it was flying the tri-colour of Petain's France. I walked across to a bookshop not yet closed and bought myself two volumes which I knew would keep me company in captivity; Grahame's 'The Wind in the Willows' and Kipling's 'Stalky and Co.' I wondered what the latter would have made of our circumstances.

Japanese orders arrived later. The British troops and officers were to be separated from the Indian, and we were to be sent to different camps. We should start the next morning on the seventeen mile march to Changi. I spent a restless night on a sofa in the damaged upper storey of the store. Outside the occasional sound of rifle fire told us that the Japs were killing Chinese looters.

Dawn, and a sketchy shave and wash in the hairdressing department. The shop staff were still there and they gave us breakfast; a meal that I was to remember for three and a half years to come. They told us that they had been told to report to Raffles Hotel for orders and expected to be sent to the Civil gaol.

I went downstairs in time to see the Indian troops and say a word to them before they marched off. This was heart-breaking. To the Gurkha rifleman and the Indian sepoy his officer has ever been his "Mán Báp." To us he comes with his worries and troubles. Those of us who had some years of service and who knew the men well realised just what this parting meant to them. From our point of view it was terrible to be sending them off into alien hands where we could do nothing for them. A handshake was about as far as most of us could get. It was altogether too emotional. To improve the occasion a Japanese soldier on the nearby pavement called two Chinese coolies to him and, without any apparent reason, shot them on the spot. The Subedar whose hand I had just shaken spat on the road and mumbled a few descriptive and comprehensive adjectives under his breath.

"Good-bye, Subedar sahib. Good-bye. We shall meet again soon let us hope and in more fortunate circumstances. Don't let them get you down. Salám, Salám!" It was difficult to keep one's eyes dry. There were many who unashamedly let the tears fall.

"Officer's, Fall-In." We formed up outside Robinsons'. Most of us, like myself, had few possessions; a pack and haversack and a few oddments. I had been given a toothbrush by a departing shopkeeper; his last action before he closed up and went off into captivity.

I took a last look around before we started. Thoughts raced through my head. How long would we be here, I wondered. How would they treat the Gurkhas and the Indian troops? How would they deal with us? What an end to those ten weeks! Had I been asked at any time during that period what I expected to happen, had I tried to picture the ending to myself, the last thing I would have seen would have been this. A Prisoner of War in Singapore! Never mind, it could not last for ever. We would even it up in due course.

Changi. The village I had motored through on the 10th with Howard. Now I was going back there to prison!

"Officers! By the right-Quick March."

25. Div. Memorial Unveiled In Taiping.

Maj.-Gen. G. N. Wood has just unveiled a monument to the 25th Indian—"Ace of Spades"—Division, which he commands, in Taiping, North Malaya.

As the General Salute was sounded by buglers of the Royal Garhwal Rifles, the Union Jack fell away to reveal a six-foot high figure of Christ mounted on a tall plinth. The plaque, which was made in the Div. I.E.M.E. workshops, bore the following inscription:

"To the Glory of God and in memory of the 25th Division which restored freedom of worship to the church".

Addressing the gathering, General Wood said: "On this sacred and joyful occasion I speak for more than 20,000 men of the 25th Indian Division—men of diverse races, tongues and creeds. Many tasks have fallen to our lot since we came among you in September—to establish law and order, to restore employment, to repair the damages of war, to feed the hungry and to heal the sick—but one task came first of all, to restore liberty of worship and re-open the churches.

"It was with the desire to commemorate these blessings that your soldier friends have erected this memorial."

Referring to the inscription he said: "We hope it will recall to you all, and perhaps especially to the children in years to come, your soldier friends who found peace and happiness among you, long after they have departed to their homes in Britain and India."

ASSISTING THE MALAYAN MAQUIS

BY MAJOR J. E. HEELIS.

GATHERED together in the jungle near Dehra Dun in September, 1944, was a small band of Gurkhas under the command of a Lieutenant-Colonel who had escaped from Singapore. They were divided into three parties, each commanded by a Major, and all the Gurkhas—officers and N.C.Os—were from those three Gurkha Regiments who had lost battalions in the Malayan campaign of 1941-42. There, in one of the finest training areas one could wish for, we started to train for a secret entry into Japanese-occupied Malaya, either by submarine or parachute.

We knew that after the disastrous battle of the Slim River, where so many lost their lives, small parties of Gurkhas had been cut off in the jungle. We also knew that some had evaded capture and were still alive, being assisted and fed by friendly Chinese. Our object at that stage was to try and contact them, arrange with India by wireless to drop arms and food to them by parachute, and form them into guerilla bands to harry the Japanese lines of communication, and possibly carry out raids on P.O.W. camps to release their occupants and take them under our wing until the arrival of the full-scale invasion.

Inside information came from Malaya that there were some Gurkhas still in the jungle. But they were difficult to contact, and were nowhere in enough strength to justify our going in with a Gurkha officer and N.C.O. nucleus only. We therefore took in a further 50 riflemen from the Training Division per unit, giving each party four groups of eighteen men. Each group was commanded by a British officer, and each had a small HQ including a wireless operator and three small sections each commanded by a Naik. Every man was armed with an American carbine, while in each group were two Bren guns and one Sten as well.

Later we heard there was in being an active anti-Japanese resistance movement in Malaya, and that British Liaison teams were being dropped in to them to facilitate the arming and training of the guerillas and co-ordinate their efforts with the plans of the Army of invasion when it came.

The Gurkha groups were therefore given the role of Support groups to the Malay People's Anti-Japanese Army (M.P.A.J.A.) or as locally styled, The Malayan *Maquis*. A three-inch mortar and an anti-tank weapon were added to each group's store of weapons to increase its striking power. All ranks did a short parachute course, including one night jump, and between the end of June and the end of July 1945, five of the groups left Ceylon by air and dropped successfully into Japanese-occupied Malaya.

My own group left Ceylon on July 21 in three R.A.F. Liberators, each carrying six men and a mass of stores, including a wireless set with batteries, a hand generator, all support weapons and ammunition, demolition stores and one month's rations. The journey—over the sea all the way except for a short glimpse of the Nicobars and North Cape, Sumatra—took nine and a half hours, and the men looked pretty green.

These Liberators had to fly over 1500 miles of water, make two or three runs over the dropping area to ensure accurate dropping, and return to Ceylon

without refuelling. To do this extra petrol tanks were fitted, and to compensate for the extra weight the forward gun turret and flanking machine guns were removed. No praise would be too high for the pilots and crews of these aircraft, as they were working at maximum range. If bad weather was encountered—as it often was—they would arrive back in Ceylon with little more than enough petrol to fly the machine for a further thirty minutes. We prayed that our pilot would receive the correct signals from the ground and that we would make a successful jump. A return trip to Ceylon fully-loaded would be little short of a night-mare, and all our carefully prepared stores would certainly have had to be jettisoned into the sea.

As we passed over the Malayan coast our despatcher received a message on the "intercom" for the slide to be let down and the men to be got ready. We all put on our equipment—small haversacks each containing a primed grenade, and jumping smocks, and then strapped on our parachutes. It was stiflingly hot, as once the slide is ready in position, there is no room left in which to move about. As we each sat on the slide in turn our static lines were hooked up, and our American carbines tied with quick release knots to our sides.

As No. 1 in the stick I sat very comfortably on the slide right over the exit hole, with the other five semehow jammed on to the slide behind me. As I looked down through the hole I could clearly see below rivers and fields, and many small houses with lights showing.

Suddenly, to my intense relief, I saw appear below me the "V" of lights on the ground. The navigator had done his job well, and there they were, ready to receive us. I took a deep breath and waited for the big moment. Three times we circled over the area, and then that unmistakable roar of the engines, which we all knew was the final run in.

"Action Stations Number One—Go!" The whish of the slip stream, and then that wonderful feeling as one looks up and sees the 'chute fully opened above one. I went straight for the quick release strings on my carbine, only to find that it had smashed into two pieces as I had come out of the hole. Luckily, there was no occasion to use it that time, as the Japs made no effort to attack the area.

It was a beautiful clear moonlit night, and from ten o'clock onwards the 'planes came in at quarter-hourly intervals. There was little wind, and all made successful descents. We were luckier than one other Gurkha group, which had dropped about a fortnight before, for half of them had landed in trees, and could not be got down to the ground until daylight.

Our landing area was a large tin talking, about 23 miles north of Kuala Lumpur, in Selangor, and within five hundred yards of the main west coast road and railway. Immediately we reached the ground we were surround-de by Chinese wearing all sorts of old clothes and battered felt hats—they had been able to get no new clothing in three and a half years—and with Sten guns slung over their shoulders. They helped us off with our parachutes, and guided us to the R.V., where I contacted the officer, who was chief British Liaison Officer with the guerillas of Selangor.

It all seemed so unrealistic. What had seemed to us to be a highly dangerous mission at the briefing now turned out to be almost child's play, as the Japs made no effort to interfere. Stores were collected from an area about a mile away, where they had been dropped separately, and were taken as quickly

as possible to the jungle edge. We then proceeded with heavy loads up a tortuous and steep path through the jungle, which to us in our excited and now rather weary state seemed never-ending. Just as dawn broke we reached the camp of bamboo and attap—a leaf like the leaf of the coconut palm, which when interlaced forms a waterproof roofing material—which the Chinese had prepared for us.

During the next few weeks we saw a lot of the M.P.A.J.A., their camps, their training, and their ration supply system from Chinese villages outside the jungle belt. Each camp had its small parade ground under the trees, where regular drill parades were carried out. Saluting (clenched-fist style, as the Chinese guerillas were all Communists) was fairly good, and discipline very strict indeed. Anyone who gave information to the Japanese of the guerillas, whereabouts or their organisation was immediately classed as a "running dog" and was invariably run to earth and shot.

My men had nothing but admiration for them and for the way they had stood up to so many years of jungle life with few clothes, short and poor quality food, and complete lack of medical supplies, resulting in nearly all of them having ulcers on their legs which had to be seen to be believed. A few days—and Chinese and Gurkha were firm friends, and in an incredibly short space of time I found my men had picked up a number of Chinese words and expressions. Several times we shared camps with the Chinese, and combined Chinese and Gurkha sentries throughout the night proved a great success.

Although on several occasions the Japs sent parties of a hundred men and more to reconnoitre our dropping zones after supply drops, we were on the whole little bothered by them, as they knew what to expect if they poked their noses too far into the jungle. We had, however, to be careful when Jap aircraft passed over to take in washing laid out to dry. Nevertheless, my group did have one brush with a party of mixed Japs and Malay puppet-troops, who tried to make a reconnaissance in force of our main jungle camp and stores-dropping area. We laid an ambush for them, and one of my Gurkha naiks with a Bren gun accounted for the first four men in the column, the remainder running back the way they had come so fast that we hardly had a chance to have another shot at them.

News of Japan's surrender was sudden and most unexpected. V. J. day in the jungle was a complete flop, owing to the shortage of rations and the complete non-existence of alcohol. We were, however, lucky to have with us a small but effective dry battery wireless receiver. It was very easily set up, as some 30 feet of aerial slung over the roof of a basha was sufficient to get good reception of S.E.A.C. Radio, Ceylon, All-India Radio, Delhi, and the Japanese Saigon and Singapore Radio stations.

It was weird to be in the heart of the Malayan jungle listening to the description by a B.B.C. commentator of the celebrations of the crowds in Piccadilly Circus. And the moving description of the scene in St. Pauls at the Thanksgiving Service, when the King and Queen, the Princesses and other members of of the Royal Family were present, was most impressive.

Base informed us that we were not to move out into the open without their permission, although we, of course, were itching to do so. On August 28 we moved down and took up quarters near the main road. We got a lot of amusement out of watching the somewhat startled and bewildered expressions on the faces of the Japanese in passing convoys, which were usually headed by armoured cars.

Next day three other British Officers and myself were sitting in the Village Police Station, when we heard a train draw into the station just behind the village. We decided to inspect it. As we appreached the station we could see it was a goods train. Each of us had carbines on our shoulders, when we were fifty yards from the train, a Japanese sentry with rifle and bayonet appeared out of the last coach and stood looking at us with an amazed expression on his face, not at all sure what to do. He shouted to the man in charge, who came doubling round the corner with a light machine gun, accompanied by two other Japs with rifle and bayonets.

It was an awkward moment, but we just moved steadily forward, leaving our carbines slung, and waving our arms across our bodies to signify that we did not intend to do anything about them. By the time they had positioned their L.M.G. we were within fifteen yards of them, and there was nothing they could do. To crown everything the train then started pulling out of the station. Two of the Japs jumped on it while it was on the move, but the private in charge couldn't quite make up his mind, and by the time he had decided that he also would leap on to the moving train it was going too fast for him to fling himself and his rather bulky L.M.G. in at the same time. The situation was saved, however, by the guard, who put out his red flag and stopped the train. And so four very bewildered Japs, suffering greatly from loss of face, proceeded on their way!

At 04-30 hours on August 31, by which time we felt confident the Japs were used to our being there, a Japanese company which had moved up in the night opened fire with all they had got on to the Police Station, which housed two British Liaison officers and a patrol of a hundred Chinese guerillas. It look some time to stop the firing on both sides, but luckily only one Chinese sentry was killed. We were none too pleased about the incident, considering that the surrender had come into effect on the 15th of the month, but it served a useful purpose in the long run, as we were able to contact Jap H.Q., take over transport and cars, and move into a comfortable bungalow in the Federal capital, Kuala Lumpur.

There I had the good fortune to be the first British officer from the outside world to visit 143 Gurkhas of my old battalion in the P.O.W. Camp, and my reception was beyond description. They were in rags, and still suffering from under-nourishment, but their morale, bearing and discipline was astounding. They had stood up to torture and beatings, but had remained firm in their loyalty to their adopted King and Empire. It was a grand sight, and one which neither I nor any of my group of parachutists who were present will ever forget.

I had a long talk with them, and told them all the news I could give them of their families and friends in the Depot at Dharamsala, what had been happening during the three and a half years of their captivity, and why we had been so slow in liberating them. They in their turn gave me first-hand accounts of the actions fought, of many gallant deeds done by the Battalion during the Japanese attack on Malaya, and of the incredible hardships they had undergone as P. O. Ws. There were in the camp a large number of Indian P. O. Ws., a complete cross-section of the Indian Army who, in spite of Japanese cruelties and efforts to subverse them, had remained loyal.

The invasion Army, which had by then been changed into an Army of Occupation, arrived about a week later, by which time we had made ourselves

fairly comfortable, although at the time we were outnumbered by something like 1,000 to 1. With the arrival of the Army of Occupation we were used to disarm and arrest Japanese war criminals in Pahang, while the M.P.A.J.A. were used as an additional police force. We were also the first regular troops to enter Trengganu State, where we had a four-day chase after some Jap escapees. The group remained in the Trengganu area for a month before the Army arrived to take over that part of the north-east coast.

Wherever we went the hospitality and welcome was most gratifying. It was good to see with our own eyes that people of Malaya were genuinely glad to see the return of a British administration after their experiences with the Japanese. I have a vivid recollection of one instance. A local Chinese businessman invited a Gurkha Jemadar and two Havildars from the P.O.W. Camp and myself to a meal in a Chinese restaurant about two days after we arrived in Kuala Lumpur. After an excellent meal we came out, only to find a cheering crowd of more than 500 people outside. It was a spontaneous greeting, which was all the more impressive because armed Japanese soldiers were at that time still patrolling the streets and standing sentry at cross-roads. Only with difficulty did we manage to make our way back to the P.O.W. Camp. Wherever we went throughout the country Malays and Chinese were lavish in their hospitality; all told of their sufferings under the Japanese, and of the rigid censorship.

Looked at in retrospect, the operation was most successful and a very interesting experience. The Gurkha once again proved himself the versatile soldier he is. Our only regret was that the Japanese surrendered so soon after our entry, and that we only had one brief chance to have a crack at him.

A Faked Film.

"The Japanese made a propaganda film at an Allied p.o.w. camp in Siam in 1943. The men were made to file past the camera, receiving fruit, eggs, Red Cross parcels, and mail. Japanese guards took these from them at the end of the performance. There was a background of Red Cross boxes; all were empty. Canteen scenes showed the men sitting at tables piled up with fruits, eggs, meat and vegetables. At the word "go" the men were ordered to start eating. The camera recorded for two or three minutes. Some of the boys did well in that time."—S. E. A. C. Communique.

The Japanese Fleet.

"Japan's army and her air force were far larger at the end of the war than in 1941. In Japan proper at the time of the surrender there were more than 2,000,000 trained military personnel; outside Japan there were more than 3,000,000 trained men. Her professional army of more than 5,000,000 men on VJ day compared with 3,000,000 on December 7, 1941. Her aircraft fleet had increased approximately 100 per cent. Why then did she sue for peace before the introduction of the atom bomb and before the entry of Russia into the war? Because by early August Japan's fighting fleet had ceased to exist; she was stripped of her sea power."—Admiral Nimitz.

JUDGING BY APPEARANCES

By "HYDERABAD."

The following stories of apparitions are taken from Phantaems of the Living, compiled about 1886 by three editors, of whom F. W. H. Myers is to-day the best remembered, and published on behalf of the Society for Psychical Research. The two volumes of this book contain some six hundred to a thousand narratives, mostly volunteered by persons of repute and often verified by stringent cross-examination of the teller by one of the Editors or an agent of the Editors. There is much analysis of these stories, and of other evidence, from a logical, philosophical or scientific angle. It is and always has been a locus classicus.

In what follows I have tried to summarise each story and to add a little by way of new investigation of the factual detail, which I have sometimes been able to do from sources which were not available sixty years ago when Phantasms of the Living was published. About forty of the narratives in that book have some connexion, direct or indirect, with India. Of these I have read all and noted most. The five which we will now consider have seemed the most striking of all, both to myself and to a competent independent critic whom I have consulted.

CHRISTMAS 1876

OF the many Christian graveyards in and about Delhi, one of the most interesting is that which belonged to the old Cantonment which was established near the village of Rajpur, or Rajpura, in 1828. The old barracks, bungalows and lines covered a large area north-west of the Ridge. The station was not abandoned till 1864; but few burials took place in the old cemetery after the storming of Delhi in September 1857. Indeed, only three interments are directly referable to later times, and one of these was that of Captain William Clayton of the 9th Lancers, who died from an accident at polo on December 26, 1876, aged 37 years and 8 months. To his death there attaches a remarkable story.

He was an extra aide-de-camp to the Viceroy. His death "during the night" from an accident at polo was announced in a telegram carrying the date-line December 26, published in the Calcutta Englishman on December 28. In reply to an inquiry made some years later, Lord William Beresford, V.C., the celebrated Military Secretary to successive Viceroys, stated that the accident occurred about 6-15 p.m. (which seems to be an extraordinarily late hour to be playing polo at Delhi in midwinter—it must have been dark or nearly dark), and that Captain Clayton died in his arms exactly as the clock struck midnight.

Despite the laudable efforts of the editors of *Phantasms of the Living* to make every fact clear, it is not explicitly stated whether the accident took place on the evening of the 25th or of the 26th December, and whether Clayton died at midnight 25th/26th or 26th/27th. (It may be added that the editors aforesaid give no clue to the *place* of death, which it took me some time to locate at Delhi). But the clear inference, as will be seen, is that the fatal game of polo was held on the afternoon of Christmas Day, 1876.

On this same Christmas evening, three gentlemen were at Sialkot, some hundreds of miles from Delhi. They were the Rev. Christopher C. G. Fagan the Chaplain at that station; his cousin George—Lieutenant George Forbes Fagan, of the 10th Bengal Lancers; and Major F. W. Collis—afterwards Major-General and C. B. (1839—1905). The Chaplain was dressing for dinner, in his own house, in which Major Collis was his only guest; George Fagan was living elsewhere, and was expected to come to dinner with his cousin.

Each of the three gave his separate account, in writing, a few years later, of what happened that evening; but there were some discrepancies—as is not surprising—and two of the three then displayed some reluctance to discuss the event in detail. The following is an attempt to tell all three versions in a fair manner, making no effort to reconcile them.

George was not—he was coming in to dinner. I heard the name "Fagan" called, and thought it strange that George should call me by our surname, instead of "Charlie" (sic). I went to George, and asked him what it was all about, and I said that it was like the voice of a cavalry officer "who had been under my pastoral charge but was then at a distant station." George replied that he too had heard the voice, and that it was probably that of Major Collis whom they were expecting to dinner.

We went into the drawing-room, and found that Collis had arrived. While we were talking to him, and telling him what had happened, the same voice repeated the same name, and they all heard it, and Collis said, "It is like Clayton's voice."

This version was communicated to the Editors, in the 'eighties, not by the padre himself, but by his mother. On his being addressed by the Editors, he displayed some aversion to the subject, but wrote (from Sitapur, on August 25, 1883) that Collis's account (see 3 below) was correct to the best of his recollection. Collis was a guest in the house, said the Chaplain; Cousin George was not. He did not remember who first suggested that the voice heard was that of Clayton. Later, the Chaplain said that he had the impression that George did not hear the voice.

- 2. Cousin George's Story.—This is short and factual. It was written at Simla, on July 31, 1885. "I remember that in the afternoon of the day on which Captain Clayton met his death, I was in the Rev. C. Fagan's house at Sialkot, and he said that he had heard his mother's voice calling to him, and that something was certain to happen. I heard no voice myself. [My italics]. When news arrived of Captain Clayton's death, the Chaplain said that the voice must have some connexion with it.
- 3. Major Collis's Story.—The Chaplain and his cousin were standing in the doorway of the drawing-room, talking, when they heard the call "Fagan!" I was dressing in my room, and they called out to know what I wanted. I had not spoken, nor had I heard the call. While they were talking together, the call came a second time, and I heard it—we all three heard it.

To all three versions, one point must be added—the news of Clayton's death did not come till "the next day" (which was probably the 27th).

Little comment is needed. The date, and even the hour, seem to accord with the evidence of—not the death that ensued, which was then unknown to the witnesses, but—the accident which caused it. The witnesses are such as

are commonly called unimpeachable, and their discrepancies are such as mark the truth in the view of those who are experienced in the judgment of diverging tales. Their reluctance to unfold, to reconcile, to elaborate, to explain, and to commit themselves to new written details five or ten years later—all these seem to me to stamp their stories as genuine. They are sure that they heard something that Christmas night, and those of them who heard the voice all connected it with their acquaintance Clayton, then distant and in the process of dying, though none of them knew it.

WHAT WAS THE DATE?

In September 1857 Captain G. Wheatcroft of the 6th Inniskilling Dragoons went to India to join his regiment. On the night of 14th/15th November 1857, his wife who was living at Cambridge, dreamt in the early hours of the morning that she saw her husband, looking anxious and ill. She immediately awoke, much agitated. It was bright moonlight, and she saw his figure standing by the bedside. He was in uniform, hands pressed across his breast, hair dishevelled, the face very pale. "His large dark eyes were fixed full on her; their expression was that of great excitement; and there was a peculiar contraction of the mouth, habitual to him when agitated." She saw him as distinctly as she had ever done in her life, and she noticed between his hands the white of his shirt-bosom. He seemed to bend forward, as if in pain, and to make an effort to speak, but there was no sound. After about a minute, his figure disappeared.

She then made certain that she was actually awake. She rubbed her eyes with the sheet, and felt its touch. Her little nephew was in bed with her: she listened to his breathing. She was sure that what she had seen was no dream, and she did not go to sleep again that night.

Next morning she told her mother what she had seen, and said that she was sure that her husband had been killed or grievously wounded, although she had seen no marks of blood on his dress. Thereafter, she behaved as a possible widow, refusing to go to any place of amusement until she should receive a letter from her husband (if alive) dated later than 14th November.

In December 1857 news was received in England that Captain Wheatcroft had been killed in action before Lucknow on the *fifteenth* of November. The solicitor in charge of his affairs duly procured a certificate from the War Office to this effect, but the widow informed him that she felt sure that there must be a mistake about the date, as it was on the night of 14th/15th November that her husband had appeared to her.

On a wooden cross erected over his grave by his friend Lieut. R——of the 9th Lancers were cut the initials "G.W." and the date 14th November 1857. (It should be noted that Wheatcroft was, when he was killed, serving

not with his own regiment but with the Military Train, the precursors of the present Royal Army Service Corps, and that many men of the Train were attached to the cavalry, and fought as such with them).

Later, the War Office accepted the date—14th—as being correct, and when in about April 1859 the solicitor had occasion to obtain another copy of the certificate from them, he found that it gave the date of death as 14th November 1857.

The editors of *Phantasms of the Living* observe that the difference of longitude between London and Lucknow is about five hours, and that therefore 3 or 4 a.m. in London would be 8 or 9 a.m. in Lucknow. But Wheatcroft was killed in the afternoon.

• We may add that, from standard histories of the Mutiny campaigns, it is abundantly clear that Wheatcroft was killed on the 14th of November, and apparently this was late in the afternoon, after 5 p.m. The best known history, Kaye and Malleson's, curiously miscalls him "Wheatley," but there is no doubt as to his correct name or identity. His grave is not now marked by any memorial, but the only other officer (A. O. Mayne) who was killed in the same attack is buried in La Martimiere Park.

THE WARREN CASE

In 1857 the narrator, a girl of thirteen, had a brother, Lieut. W———, serving in the 8th Bengal Native Infantry. The family usually heard from him regularly, but in June and July no letters came, and those that arrived in August proved to have been written quite early in the spring, and were full of the disturbance around his station. The girl, who had been unwell, was much worried at the absence of news, and sometimes dreamt of her brother.

Once, when the personal appearance of her brother was being discussed, she remarked, "Oh, he is not like that now, he has no beard of whiskers"; and when asked why she said such a thing, replied "I know it, for I have seen him in my dreams"—and was severely reprimanded by her governess for talking nonsense.

On the morning of the 25th September 1857 she awoke from a dream to find her sister holding her, much alarmed. She had screamed and struggled, crying out, "Is he really dead?" Then, ceasing to struggle, after about a minute she cried out, "Harry is dead, they have shot him!" When she had recovered somewhat, she told her dream to her sister. She had seen Harry riding with another officer, and mounted soldiers behind them. On this her sister interrupted, "My dear, that shows you it is only a dream, for you know that Harry is in an infantry, not a cavalry, regiment." But her feeling that she had seen something real was not to be shaken, and the sister was sufficiently impressed to make a detailed written note of the dream, with dates.

Shortly afterwards news came through that on the morning of 25th September the brother had been shot down, on his way to Lucknow; and a few days later came one of his missing letters, telling how his own regiment had mutinied, and he had been transferred to the 12th Irregular Cavalry, which was to join Havelock's force in the relief of Lucknow.

About eight years later, the officer who was riding with Harry when he fell, a Captain or Major Grant visited the family and, his version of Harry's death tallied minutely—" even to the description of the buildings on their left"

—with the notes taken on the morning of the dream. The family also heard that Harry had made an alteration in his beard and whiskers just about the time that Miss L. A. W——had spoken of his wearing them differently.

The editors of *Phantasms of the Living* comment that the date of death is given as 25th September in *Allen's Indian Mail*, but as 26th in the *East India Register*, but that there was hard fighting on both days and in some accounts the name of officers who fell on the two days are grouped together without discrimination.

We may add that "Harry W——" is easily identifiable as Lieutenant Charles Henry Lycett Warren, of the 8th Bengal Native Infantry, who according to the Bengal Army List, 1858, was killed in action at Lucknow on 25th September 1857.

FOUR APPARITIONS BEFORE BREAKFAST

About the year 1859 Captain Robert Fagan, of the Bengal Artillery, who was in charge of the bridge of boats across the river Ravi at Lahore, was out in the district collecting boats. One morning during his absence his eldest boy, then aged about six, on seeing his mother had dressed for breakfast in a coloured muslim gown, asked her to take it off and wear a black one—"because Papa is dead." His mother, after diverting his thoughts for a short time, said, "Shall I put on a black dress now, Charlie?" "Oh, no," he replied, "Papa is not dead now," and he ran off.

On leaving her room Mrs. Fagan was met by her head nurse, the Scottish wife of a soldier of the Bengal Artillery, who asked if she had heard from the master that morning. Mrs. Fagan replied that his usual letter had not come, on which the nurse remarked: "Something very uncanny has happened to him, for, looking out of the window just now, I saw Annie (the under-nurse, another artilleryman's Irish wife) and the gardener go up to master's favourite rose-tree and pick a flower, and before she could have got in from the garden, I found her in the night nursery, which she had never left, finishing the children."

Not thinking much of this, Mrs. Fagan passed on to the breakfast room, where she expected to find her visitors, Captain William Reveley of the Bengal Army and his wife; but they were not there. So she went to Mrs. Reveley's room, and found her still at her toilet. For this unpunctuality Mrs. Reveley apologised, "saying she had had a dreadful fright, having seen Mrs. Fagan standing in front of the chest of drawers, who, when asked how she had come unobserved into the room, turned round and then deliberately vanished through the chest of drawers and the door behind it."

This third strange circumstance within such a short space of time led Mrs. Fagan to relate all three at the breakfast table to Captain Reveley, but to her surprise he cut the conversation short as soon as she had finished her story.

Five days passed without any news whatever of Captain Fagan, and then he arrived home, looking very ill, and said that on the morning when the strange things had been seen at his home, he had been in a boat which had capsized, was nearly drowned, and was resuscitated with difficulty.

Then Reveley said to Mrs. Fagan, "I must apologise for my brusqueness of manner that morning, but I feared to alarm you by seeming to attach any importance to what had happened, and lest I should be induced to tell you of the greater fright I had myself. For, Fagan" (addressing his host) "as I passed from your office, where I had been reading with the munshi, and going through the drawing-room, I distinctly saw you sitting in your usual chair,"

Mrs. Fagan was living at Newton Abbot in 1883, when she narrated this story. Her husband, Captain Robert Charles Henry Baines Fagan, was killed during the siege of Delhi on 12th September 1857. From an account of his services which I have consulted, it appears that in Jauuary 1852 he was temporarily appointed to the Department of the Civil Engineer in the Punjab, as Superintendent of Civil Buildings at Lahore, and he continued to hold this post till October 1854, when he was transferred to Dalhousie. The date of the accident and apparitions was probably 1852–54, and not about 1850 as his widow thought, although he was serving at Lahore with the artillery from 1847 till 1852. He came of an Irish family of which many members became John Company's officers; his father was a general in the Bengal Army; and his wife was the daughter of a Bengal medical officer. They were married in July 1846, which would also indicate a date later than 1850 for the apparations, for they occurred when their eldest son was about six years old.

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INDIA'S WATCHWORD—READINESS *

BY MAJOR-GENERAL S. F. IRWIN, C.B.E.

"The question whether or not a nation be desirable as an ally is not so much determined by the inert mass of arms which it has at hand but by the obvious presence of a sturdy will to national self-preservation and a heroic courage which will fight through to the last breath.

"The British nation will therefore be considered as the most valuable ally in the world as long as it can be counted upon to show that brutality and tenacity in its government, as well as in the spirit of the broad masses, which enables it to carry through to victory any struggle that it once enters upon, no matter how long such a struggle may last or however great the sacrifice that may be necessary, or whatever the means that have to be employed: and all this even though the actual military equipment at hand may be utterly inadequate when compared with that of other nations."—'Mein Kampf. (page 279).

ROM our experience of World War I it appeared that a western nation making a maximum effort could put into its fighting services about one-tenth of its population. This is after the women, the young, and the old, the sick, and the halt, have been allocated to other tasks, and although this is only an approximation it is one which World War II showed to be somewhere near the mark. The world has therefore wondered why India, with a population of some 380 millions, managed to produce a fighting force, including its services of supply, of only two and a half millions, or less than 1% of its population. We offered some explanations. We said that this was the largest voluntary army in the world, that India feeds itself, that some 90% of the population is occupied in agriculture, and that their diversion to other work would cause famine. But although these were factors in limiting the expansion of our forces, they were not all the factors.

True, we could have mobilized more men, yet we in India could still not have produced with the material available a larger or more efficient Indian Army. For a fighting force, mere quantity is not enough. In 1942 an Indian political leader said to me: "India's great strength lies in her numbers. You have only to arm the millions of India, and she can drive any invader from her soil. Come the four corners of the world in arms, etc. . . " It is this speciousness in matters of the greatest moment which appals the professional soldier, but which, fortunately, does not blind him to the truth. In a long history of conflict

[°] This paper, submitted for our last Gold Medal Essay Competition, was considered to be of such a high standard that the Judges recommended that it should be published in the Journal of the Institution. It was, of course, written before the end of the war in Europe. The subject set for the competition was:

[&]quot;During the present war there have been certain limiting factors to the expansion of the Armed forces of India as regards personnel, equipment and armaments. Consider in relation to any one, or all three Services, in what manner they could in future best meet their peace-time commitments within the probable limitations of post-war finance, and at the same time form a sounder basis for expansion if the need should occur,"

the millions of India have always been defeated by any small organized army that burst into India, and in 1942, as in 326 B.C., the numbers of India would have no more impeded the Japanese than they did Alexander the Great.

The problem before the Commander-in-Chief in India was the defeat of the Japanese, and none would have known better than he that this meant attacking and destroying them. Therefore every Indian Division which was raised had to be capable of defeating an enemy division in the field. In no way could this be accomplished with armed men who were little more than guerillas. Guerillas appeal to the public as something attractive and romantic, but all that guerillas have is a nuisance value after the main fighting forces have defeated and thrown back the enemy. This is the lesson which the Americans tried to teach the Chinese.

This policy of producing only Indian formations capable of defeating the highly-trained and organized enemy formations, was essentially right and has been more than justified by victory. The alternative of producing hordes of armed guerillas who clutter up the communications, eat down the countrysides like locusts, and have no offensive power against any effective fighting force, would have been entirely wrong, and would never have kept the Germans out of Cairo or the Japanese out of India.

Our problem, then, is to consider what have been the limiting factors in producing organized and trained fighting forces, and not merely in arming a population or raising a home guard.

THE LACK OF LEADERS.

Victory in war, over and above any skill and resources, demands above all greater courage and better leadership. However vigorously we wave our flag and blow our bugles, no man dies gladly, and it requires the greatest courage, and the sternest sublimation of our natural instincts for self-preservation, to advance over any piece of ground in the face of the enemy's fire. No large body of ordinary men of any nation could ever be got to do it unless they had among them a sufficient number of men of such implacable spirit that they will lead their sections or their battalions to a point where an equally determined enemy can be reached with a bayonet.

These men are leaders, and without them no fighting forces can win a battle. They are required in all ranks, but particularly are they required in command of platoons and companies and battalions where skilled, as well as courageous, leadership is demanded. These are the commissioned officers, and it was here that we came up against one of the biggest obstacles in the expansion of our forces in India.

It is as well that we face the truth in this matter, however unpalatable it may be, because unless an independent India understands this thoroughly for the future she may well, like Mussolini, waste her money on a worthless army. The V.C.O. has throughout played his customary gallant part. He has been trained and picked for leadership which is limited only by his lack of education. There have, too, been many educated Indians who have led their men bravely and skilfully, and many who have been decorated for their courage. Many others have died in keeping the enemy out of India.

Yet the distinguished services of these men must not blind us to the facts. Without any further expansion we require for the Indian Army some 40,000 officers. Of these less than one quarter are Indians. The remainder have had

to be borrowed from the British Isles, because all our efforts could not produce sufficient educated Indians capable of leading their own men into action. There was no lack of young Indians who were full of learning, for a large number of universities had been turning them out for a hundred years, but what these graduates had not acquired was that initiative, character, and power of leadership which would have justified their being trusted with the lives of their own illiterate countrymen.

These are hard words, but they cannot be laughed off with the escapist's comment that it would have been different with an independent India. It would have been incomparably worse, as India, lacking leaders of her own, would not have had a call on all those thousands of British officers who have led her armies, knowing little Hindustani but the two words "follow me."

It is, however, not a insuperable problem if the years of peace are wisely used. Very few babies are born leaders. They are made into leaders by their environment and education, and by their practice in leadership from an early age.

AN ILLITERATE POPULATION.

Unquestionably a peasant population shows sterling qualities, and in the history of war, where courage has counted for so much, the peasantry have long held pride of place as soldiers. But with the coming of this century and the general industrialization of life, war became a sternly scientific business, only to be won by the full employment of a nation's material resources. In the West, we have long since arrived at the stage when the most effective means of making war, which include wireless sets as well as lethal weapons, can only be taught to, and properly employed by, a man with a basic education.

Between the last two wars, and in the face of much opposition from among the military themselves, the Indian Army concentrated on the education of its own peasant personnel, and those of us who are able to look back on the Army of 1918 know that what has been done in this adult education has paid big dividends. But that has helped us little towards expansion, because to multiply the peacetime army by twenty, which we have done, meant drawing heavily on a civil population still largely illiterate.

We arrived quickly at a stage when our men could not get the very best out of the best equipment. These willing men, keen and full of courage, tried all they knew, and the standard of mechanical ability they reached astonished their own officers, but both in quality and quantity it fell short of our requirements. While we could raise and train companies of disciplined riflemen, we could not support them with all those essential specialists, such as signals, without which a modern army cannot defeat a well equipped enemy.

When it comes to backing a lorry to the door of an aircraft, or to tuning in a wireless set, the primitive peasant appears to be wearing a pair of boxing gloves, and he finds his fingers untrained to the fine adjustments which these things require, and while the peasant has something initially which either the western townsman has not got, or has forgotten, it turns out to be quicker to teach that townsman to return to earth, than to turn the child of nature into a fighting artizan.

Given a basic education shared widely by the population of India, which means nothing more than the ability to read a book and understand it, we could have produced these specialists in the numbers required. They were not to be had.

THE LACK OF TRADESMEN AND ARTIFICERS.

The preceding paragraph has dealt with a standard of general education that determines how far and how quickly a man can be trained to any task involving intelligence and judgment, but not high technical skill. This paragraph deals more particularly with a narrower form of education of paramount importance for war.

Modern war is fought with complicated tools and weapons, and the bull-dozer is no less important than the gun. Even more than the army, it is the Navy and the Air Force which require large numbers of men who are highly skilled at working with tools and weapons and machines of precision. No modern naval power recruits its sailors from the fishermen who live along its shores. Whether a man can swim, or aistinguish a herring from a mackerel, is a matter of indifference to the Lords of the Admiralty. They want men who can read instruments, mind and mend machinery, and handle some small part of the most complicated contrivance in the world—a warship. In the air forces, to maintain every pilot in the air, we require some twelve men or more on the ground. Most of these must be highly qualified technically if the aircraft is not to fail the pilot when its full power is required. And behind all these services many more tradesmen and technicians are needed to forge and fashion the weapons, vehicles, and instruments before they can be put into the hands of the fighting forces.

It is this technical skill, and these tradesmen and artificers which India has lacked. Without them, no fighting forces can expand. The size of any army, navy, or air force is limited by the tradesmen and technicians it can call upon. It takes two years to make a tradesman, and five years to make a skilled artificer, and a country which is largely illiterate, mainly agricultural, and employing unmechanized methods of farming, can never hope to wage war on the same scale, and with the same power, as the highly educated and industrialized nations of the West.

THE LACK OF MATERIAL AND SHIPPING.

India was not alone in the Commonwealth or among the Allies in being unprepared for a World War. Preparation for war is expensive, and any nation which will not face this expense has only one alternative: that is, to become allied to a wiser nation which will keep the enemy at bay while the unprepared nation mobilizes its resources. As this mobilization takes from two to three years a policy of unpreparedness is extremely risky, and because it prolongs the war is ultimately more expensive. Of all the Commonwealth armies in 1939, India's small professional army was in many ways the most ready, but not for a modern World War. It was well led and well trained, but not trained for fighting any particular first-class power on any particular terrain. Its organization into Regimental groups, each with a training and a territorial battalion, formed a good basis for expansion.

This Indian Army was, however, only just beginning its mechanization, and this could not be completed from resources within India. Still less could she expand her army without these resources. There were some things she could make for herself, such as rifles and light machine guns, ammunition and armoured plate, and indeed she was early called upon to supply other Commonwealth troops with these light arms. The heavy equipment, the tanks and the aircraft, she could not immediately make and the problem then was either to increase her own industrial effort to provide them or to rely on the factories of England and America.

The decision was taken that while India's factories would be stepped up in war production to their maximum extent, India must still largely rely on England and the U.S.A. However inevitable this decision was, it forced India to compete for arms and equipment with the other allied nations, and made her progress dependent on the availability of shipping. This vastly slowed up the expansion of the Indian Army, and we passed through a perilous period when we had the men but could not adequately equip or arm them. In expanding for war, men and material must come forward on parallel lines, since the arms and equipment are required not only for the actual fighting, but for training the men in their use.

DEFENCE

If you stand on the top of the Mark Hopkins Hotel in San Francisco and gaze out over the Golden Gate the world may appear as peaceful as it did when Magellan named that ocean the Pacific. But appearances are deceptive, and while the hopes of the world are centred on finding some international system which will save us from war, the intrinsic part of this system must lie in the readiness of the United Nations to stamp out any aggressor before he can profit from his aggression.

A war once started in a period when peace-minded nations are unprepared, grows in geometrical progression, and soon involves the world. It is like a fire with a high wind and no fire brigade. But like a fire which is fought immediately before it can gain ground, it can most easily be stamped out in its early stages. Defensive action against any aggressor is not good enough. Aggression demands counter-aggression, immediate and powerful, and it is this which every nation, if it cares for peace, must be prepared to perform, not just for itself or on its own decision, but as part of a plan of the nations with whom it is united.

Wars differ so much in the variety of weapons employed, and in the means of waging them that the difficulty of planning for a war which may be forced upon us at a time and place we cannot calculate is immense. The aggressor, knowing the time and place of his planned aggression, will always possess great initial advantages, and the new long-range weapons which the war has brought forth, and others which the future may produce, may well make a sudden assault difficult to combat.

But however devastating such an initial attack may be, the aggressor nation still cannot succeed in war unless she is able to press home the initial advantage and prevent her enemy from developing her war potential. This the Germans were able to do in their attacks on Poland and France, and it was this that the Japanese failed to do in their attack on the U.S.A.

BASIC PROBLEMS OF THE DEFENCE

The first problem of the defence is to ensure that the nation's war potential is not permanently destroyed. So far in the history of war, the only certain way of encompassing this destruction is the complete occupation of the country with land forces. The defence must therefore be fully prepared to protect its soil against occupation by the enemy, and the size of the regular fighting forces and their immediate reserves will mainly be determined by the numbers of men, ships, and aircraft required to counter the first blows. If Britain has come out on the winning side in two World Wars, we must appreciate that in both of those wars she was allied to nations which had conscription in peace, and were therefore able to bear the strain of attack until Britain was ready.

The power of heavy bombardment, either from the air or from land over immense distances, can certainly go a long way towards destroying industries, but with the protective measures against bombing which are obviously possible in the future it is still unlikely that the actual capture of the country by land forces can ever be dispensed with.

The second problem in the defence is to ensure that, while holding out against attack, the country has all the resources necessary to mobilise and equip her fighting services. For this, two things are required: the intelligent distribution of the factories and their protection, and the preparation in peace of all the plans and blue prints required for a rapid change over to war. The frontiers of India are no longer only land and sea frontiers. For every country in the world, the air is now an open flank, and this will postulate the protection of large inland areas containing essential war industries so that they cannot be destroyed by long range air bombardment, or airborne troops. While an aggressor nation, choosing its own time for assault, can go into mass production of the latest weapons, no non-aggressor nation can afford to keep all its fighting forces continuously up-to-date in equipment. All that the regular forces of the peaceminded nations can do is to test designs and approve or disapprove them, and study the technique of, and the training with, new weapons.

The third problem of the defence, to which the first two problems have been only preparatory, is the organization of the nation for attack, and this requires an expansion plan which can be put into force on the first day of war. There are many good reasons why nations are usually unprepared for war, and the first of these is that they have not considered it desirable to reduce their standard of living in peace to provide the money required, but there is no good reason for not having plans ready for expansion once the war has started. This planning involves the whole nation and not only its fighting services. Industry, labour, agriculture, medicine, education, all are concerned, and any planning team in peace must contain or co-opt all those who will be so much concerned in war.

From these considerations it will be obvious that the aggressor nation begins with advantages so great that only a Commonwealth of Nations could hope to arrest her progress. Meanwhile each nation in that Commonwealth must concentrate on the protection of its war resources, and have its plans for expansion immediately ready.

PROBLEMS PECULIAR TO INDIA'S DEFENCE

India has a particular problem on her North-West Frontier which for long has been a constant drain on her military resources and treasure. Soldiers of many generations have seen but one solution to this—the disarming of the tribesmen in co-operation with Afghanistan. If these million tribesmen are able successfully to maintain that in the world of 1945 every man must carry a lethal weapon, then all the United Nations are talking nonsense. This is unlikely. The truth is that while arms are permitted in tribal territory, all men must have one. If no man has a rifle, then no man needs a rifle.

As a training ground the North-West Frontier is out of date. It commits the troops to obsolete forms of warfare which are useless against a first-class power. Before, therefore, India settles down to organize her army, she should completely disarm the frontier tribesmen. It should be done by the Indian Army, with the agreement of the United Nations as part of the plan for world peace. The subsequent control of the frontier is then the role of an Indian Police Force, which may well include constables from the erstwhile warring tribes.

No country which still requires an army to preserve internal peace has yet arrived at nationhood. The employment of an army on police work may be economical, and in emergencies essential, but it is nonetheless highly undesirable. It also has the unfortunate affect of making the army unpopular with the civil population upon whom the army will depend for expansion. A new Indian Government should, if the internal situation requires it, do everything necessary to strengthen its police force, but should never regard its army as being merely a police force of greater power.

PRINCIPLES AND METHODS OF EXPANSION

There can be no growth except from a seed or a cutting, and the first principle for expansion in war is to ensure that we possess in peace, and in however small a degree, all the essential parts of a fighting force. Nothing illustrates this principle more vividly than India's vicissitudes with her Armoured Corps. Lacking an Armoured tracked element at the beginning of the war, she lacked everything which would have gone with it. There were no experienced officers and men, no workshops with their artificers, no settled doctrine for the tactical employment of tanks, and therefore nothing to build upon.

As a result of this initial lack it took between five and six years to get Indian medium tank regiments into action against the Japanese. It cannot be too strongly stressed that the weapons or the vehicles by themselves mean very little. Several shiploads of tanks from somewhere overseas is not an armoured fighting formation. Unless you have had these tanks in peace, and build up all the skilled services needed to keep them in action, then those tanks will not get into action for a very long time. The existence of one medium tank regiment in India before the war would have been little enough, but it would have meant that we should have had the technical knowledge, the workshops and recovery sections, from which we could have expanded. We should also have known what we wanted.

In the organization, then, of an Army, Navy, or Air Force, even though we cannot foresee just what course a war will take, or what new weapons a new war will produce, we must make up our minds on the essential elements for any fighting force, and see that our services have them.

A second principle of expansion is that all designs and plans must be kept concurrently up-to-date. The annual question which the Defence Minister must ask his staff the moment he has recovered from the New Year's Eve celebrations, is: "Just how do we stand if we have to fight a first-class war this year?" This question must call for the annual revision of all designs, blue prints, jigs, and sealed patterns. It will call for firm decision and selection from a surfeit of expert opinion, but it is better to be wrong and ready than to take the risks of being unready and probably just as wrong.

Our best example of pre-vision in planning for World War II has been shown to us by the Royal Air Force. Their budget was not large before the war, and their strength in squadrons bore little relation to the air strength of Germany, but when they were put to their first severe test in the Battle of Britain, it was clear that their aircraft lacked nothing in design and power. This is a matter in which the best will always be the enemy of the good, but the moment a war becomes inevitable a country must go immediately into the production of the good. The best will come later.

METHODS OF EXPANSION.

The various methods for expanding the manpower of a fighting force can be stated shortly. Combat troops should be between the ages 18 and 33 and this gives us fifteen years as the useful life of a combatant in the lower ranks for purposes of planning.

We can have a long service army in which the men can remain for 15 years. This provides no trained reserve, and our army on mobilization is no larger than it was in peace.

Alternatively we can divide this 15 years into two periods, one in which the man trains continuously with the colours, and the other in which he is held in reserve in his village and trains occasionally. Under this arrangement the size of the army on mobilization, once the scheme has been in operation for some years, will clearly depend on the number of years allotted to each of these periods. If men serve five years continuously, and ten years in reserve, then on mobilization the strength of the peacetime army can be trebled. The shortest period of colour service and the longest period of reserve service, gives the greatest expansion for war. Just how these two periods are allotted usually depends on the time taken to train a man in his particular arm of the service, and because specialists such as signals and sappers take longer to train, there will always be a shortage of reserves for these arms unless they are kept overstrength in peace.

The next stage may be called the territorial army method, and under this plan no period of continuous service is carried out. Civilians are trained intermittently and, for a small retaining fee, practise with their weapons for a fixed number of hours a year. They form a reserve over and above anything which the regular army can produce, but they are not fully trained men. They are men who have sufficient knowledge of their arms and of military matters to make them efficient soldiers in a much shorter time than the recruit straight from civil life.

This method is the customary compromise in countries which do not favour conscription. Its main disadvantage is that the training is part-time, piecemeal and discontinuous. It cannot give a man that corporate spirit he acquires by living with an army, and it requires a permanent overhead organization which is not most economically employed. The most effective method of expansion is the conscription of all or certain selected men in the nation for a period of full-time military service varying from one to two years. This is the long-standing system of all European armies.

We should note here that irrespective of whether a nation has or has not conscription in peace, it cannot avoid conscription in war if it is required to make the maximum effort of which that nation is capable, and if it does not make this maximum effort it will be beaten in the field by a nation which does.

The disadvantage of conscription is its expense, and in democratic countries where the freedom of the individual is exalted, there is a strong dislike for any form of regimentation. Its advantages are the great power it provides both in war and politics, and the superior physique and health which military training can impress upon a race. Wisely used, this period of compulsory military service, can become a potent factor in the education of the nation.

Among these alternative methods of expansion the nations normally pay their money and they take their choice, but there has grown up in many countries in recent years a system of semi-military training which might suit India very well. This is the training of boys and youths. In India men develop at a younger age than in the West, and if India cared to organize her youth for

military training she would get them at a most impressionable age and when they are highly trainable. By concentrating on the training of her boys of 13 or 14 years of age she would be laying the foundations of a great power.

The main feature of all training, skilled or unskilled, which a nation must impart to its fighting forces is discipline.

ESSENTIAL COMPONENTS OF A FIGHTING FORCE.

We have said that a fighting force must contain within it the seeds for its own growth. To illustrate this by one example we will say that an army must possess an armoured tracked component. Just what this will amount to in World War III, and whether it will turn up as a tank or an armoured rocket thrower or an amphibious carrier, no one can now say. But the acceptance of such a component postulates that in our peace planning we shall consider all the war potentialities of tracks and armour, and how far the factories making agricultural machines for the new India could be rapidly turned over to make the war machines we eventually select for mass production.

The essentials for any of the fighting services are first considered, and then the essentials for an Army, Navy, and Air Force separately, but we must not assume that our three Services, or the various arms of those Services, are immutable. At present our three Services, in *khaki* and two shades of blue, seem to have evolved because we have carried over from our kindergarten chemistry a division of the world into solids, liquids, and gases, which logically, but not too logically, leads to an Army, a Navy, and an Air Force. But now the infantry hurtle through the sky and drop out of it, and ships stand away from ships and send their aircraft to each other's destruction.

Similarly it has never been clear whether arms were differentiated by their weapons or the means of carrying them, as, for example, artillery (a gun soldier) and cavalry (a horse soldier), the latter having now baulked at both and being called armoured soldiers. But any confusion lies more in their names than in their roles. Such systems of division only become obstacles to progress when our minds are so bound to them that a gunner cannot observe his own shells because a man must not fly unless he is in the air force. Air transport can no more be a monopoly of an air fighting service than all ships are a monopoly of the navy or all railways a monopoly of the army.

COMPONENTS FOR ALL SERVICES.

The essentials for all services are leaders, men, morale, and communications.

The leaders of a nation's fighting forces must first be free from the capriciousness of its internal politics, and they must have traditions and ideals of service which far transcend political passions, and are unaffected by the passing of power from one party to another. Leaders can be trained to this freedom if they have any real love for their country, but no thinking soldier in India to-day can believe that the Indian higher schools and universities can find sufficient officers for the fighting services without radical change.

Undoubtedly the ideal conditions are provided by civil seats of learning upon which a nation can call in her extremity for leaders, knowing that the men those schools and colleges produce have some powers of leadership, and this is the system which runs in the west. But it does not yet run in the east, and although India must eventually arrive at this system, the process of doing so is

certain to take so long that, if the Indianized fighting services of the near future are to have any real efficiency and a good start, they cannot and dare not wait for the reorganization of the civil education services. It fittingly behaves the efighting services of India, who have so greatly increased the world's esteem of their country, to give the lead to India in the education of her officers.

We shall require three types of schools, one based on the boys' companies system and taking boys from the age of nine, one based on the Dartmouth system and taking boys from 13, and a third which combines the best of West Point and Woolwich for youths between 17 and 22. These schools should be designed to take twice the numbers which are required for the peace establishment of the fighting services. The other fifty per cent. go to the Civil Services, to industry, and the professions, thus forging that first necessary link between the Army, Navy, Air Force, and civil population.

The first role of these schools is training in character, and in those qualities which men require, not only in the Services, but in any walk of life, or national activity. At the age of 22 years the leaders will have been basically trained. Those who remain in the Services will then begin their specialized service education, and this must be far wider in scope than hitherto has been thought sufficient for an officer. The officer of the past has been very much out of touch with science, industry, and big business. On the other hand he does not need to spend ten or twelve years commanding a company. Periods of command must alternate with travel, with attachments to factories and other potential war activities as well as attachments to other services, and to other arms of his own service.

All officers must be provided with adequate courses for the study of war, both in command and staff work, and generally there should be a course of approximately one year's study in the rank of lieutenant (weapons and tactics), captain (staff work), and major (high command).

THE MEN.

Every war discloses that men can be trained far quicker in war than they are in fact trained in peace. The reasons are first that the money is available for the training, and second that we know the enemy we are to fight and the country we must fight on. These are conditions we can never completely overcome in peace, but they can certainly be partially overcome if we keep in mind the principle that the fighting services must constantly train for total war. If any generation of men believe that it is either peace in their time or at the worst war against a second-class enemy, then that generation will live to be astonished and suffer the severest reverses. The greater task will include any less task, and India should organize and train her fighting men on the assumption that she will have to fight a first-class Power anywhere from the Mediterranean eastwards to the Pacific.

If India has come well out of the war, the men who have done it are the Indian sepoys and sailors and airmen who have carried their colours to so many countries overseas. We are sanguine that India's fighting services can make as great a contribution in the years of peace which may follow the defeat of Japan, but only if the Services are regarded as being one of the best means of educating the youth of India in the higher qualities of character,

The Services should get their men as young as possible for pre-Service training, and this means the retention of the boys' companies, which have been so successful. With two years boys' training, and five years with the colours, the Services should aim not only at turning out a fighting man, but a man trained to citizenship and to a trade. It could be done in the time, but it means a breakaway from the endless repetition of the parts of a machine gun, the long afternoon hours lying on a charpoy, and the long annual periods of prewar leave.

MORALE.

War is a matter of human nature, and is fought with human beings each of whom places as much value on his life as every member of the Assembly. Before a man will fight well he must have some loyalty to a country, corps, or cause which he believes worth fighting for. There is at present, among the many races and religions of this diverse continent, no strong overriding loyalty called India. There will be, later, and a united and independent India will foster it, but it may still be too large a loyalty to help a fighting man confronted by a savage enemy.

In Britain we have a Royal Navy, a Royal Air Force, but no Royal Army. The first two work well, and are often on occasions reduced to the narrower loyalty of a ship or a squadron. British Army loyalty runs by regiments, and it is expected of any battalion of the regiment that the men will carry the same high courage in 1945 as their ancestors did in 1745. The sacred traditions of their military successes are carefully preserved and handed down by each regiment through the centuries.

This is the same system which the British have introduced into the Indian Army. For flexibility of reinforcements in war the regimental system in any army is not a good one, since it means that reserves of one regiment cannot be sent to reinforce another regiment, whose immediate needs may be greater, without setting aside the carefully conditioned regimental spirit.

For military purposes the wider the loyalty is spread the easier is the organization of the Armed Forces. A good example of a very wide loyalty is found in the Australian forces, where every soldier wears the word Australia on his shoulder. But let no man think that this is a matter of mathematics. It is a matter of human nature and the deepest emotions, and any politician who started monkeying with a regiment's traditions would quickly find he had laid hands on the cub of a very angry tigress.

What matters is what the officers and men will fight for, and whatever that is, that we must have and keep. In the two World Wars we have seen traditions built up round divisions and armies, but between the wars we disbanded these formations and let the traditions die. Yet the divisional spirit might well be preserved and built up in peace, provided we insist on keeping our troops together for training, and refuse to use them as police dispersed all over India. If the peace army of India is organized, located, and trained as divisions, on a territorial basis, then a divisional tradition and loyalty could be built up.

There are many thoughtful men, who, having seen the interdependence of each of the three services on the others, advocate one combined fighting force all wearing the same uniform. This is a very logical conclusion, but if logic determined human behaviour there would be no war. War comes about from men's emotions, and is won or lost by their sentiments, their courage or their

cowardice. A commander's first consideration is the morale of his men, and if it improves the men's morale to wear a different coloured coat or a different badge then they must have them, and organization must accept all this sentiment as a condition of its problem.

COMMUNICATIONS.

All services have to communicate among themselves and with each other. We have passed through some painful periods in World War II in trying to learn each other's signal language, procedure, and system. If our Indian Signals undertook to supply the personnel for all three Services we would go a long way towards co-operation. Whether the signalmen wear different hats in the different Services does not matter, but if they are first centrally trained before specializing we should soon arrive at some conformity of practice.

COMPONENTS FOR AN ARMY.

It is not the intention to consider under these paragraphs all the various arms and ancillary troops of the three Services. If any are omitted, such as medical supply and transport units, it may be taken that the necessity for them requires no discussion. It is the intention to state the basic roles for which our forces should train and organize. The methods of carrying out their roles may change considerably with new inventions, but yet without altering the basic factor for which they have here been selected.

The first component for an army is infantry. Infantry fight on their feet and deal with all weapons which can be man-handled in battle. The manner in which they arrive on the battlefield, and it may be in a parachute, does not affect their role. At present a parachutist is properly an infantryman. Should it come about that a crew of them can be dropped from the air in a tank, then they will pass into the next sub-paragraph, but we must not confuse their fighting role with their means of transport.

The next component is armoured fighting units. Whatever the future may bring forth in armoured mobile weapons which can close with the enemy on land, it is the job of this component to train and fight with them. If it ever comes about that an armoured vehicle acquires the same mobility and ubiquity as a man on his feet then infantry may be replaced by the armoured corps, but at present there are no signs of it.

An artillery component is required dealing with all long range missile firing weapons which cannot be manhandled in close contact with the enemy.

An engineer component will undertake all the skilled engineer work required which the other arms have not the technical training to do for themselves.

Finally, and this is a departure from past practice, an army must have its own air transport component. There is no intention that the army should fight air battles, but the war has shown that transport aircraft, whether they are used for carrying supplies or casualties, for inter-communication, or for dropping or landing infantry, are required even more by the army than by the Air Force, and the army should therefore have them and fly them. When necessary the Air Force will protect them in the air as the army protects the Air Force on the ground. All army officers must learn to fly as part of their basic training.

With the above components, and with the ancillary services which each or all require, there should be no land fighting role beyond the capacity of an army. If it turns out that the army of the future must be airborne, we have all the components necessary to make it so.

COMPONENTS FOR A NAVY.

There are four basic components required for the Royal Indian Navy. They are:

- (a) Aircraft carriers, with aircraft piloted by naval officers for the destruction of enemy ships;
- (b) Surface craft for escort work;

(c) Submarines;

(d) Assault and landing craft for amphibious operations.

India should aim at building these ships and craft in her own shipyards. Only by doing so will she acquire the means of repairing or replacing them quickly in war.

COMPONENTS FOR AN AIR FORCE.

The world has witnessed a vast experiment in war which may re-model the shape of wars to come. The means by which Japan was forced into surrender before many of her large armies were defeated indicates that India should put her main effort into her air forces, and her main factories underground. But whatever the relative proportion of her three Services may be, and whatever aircraft jet propulsion or rockets may produce, the basic components for an air force would still seem to be day and night fighters, and day and night bombers, with air transport as an ancillary. If therefore India is limited to ten squadrons in peace, then, with a view to expansion in war, she should include these five components within her air force.

But if India is ever to become an air power she will require to make her own aircraft.

INTEGRATION OF THE SERVICES

So far the Services have been considered separately, but they do not fight separately, and even when the bombers fly off on a distant mission it must still be part of one plan.

Under the proposed system for training leaders, the officers of the Indian Navy, Army and Air Force will have been brought up together in the same schools and colleges. They will then separate for the specialized training of their own Service. They will come together at the combined staff college, and again later at the combined higher war school.

In the control of the fighting forces of India a Supreme Commander should work under the Defence Minister, if only because the combined Services require a continuity in their planning and training which is not provided by Ministers who change with political parties. The Supreme Commander then has his own fully integrated Headquarters through whom he deals with his Navy, Army and Air Commanders. There is in South East Asia and India Commands to-day ample experience of this to provide us with a very good guide to the combined fighting services Headquarters which India requires.

An important section of this Headquarters will be concerned only with research. Their role is to keep in close touch with science and industry, and to see that anything useful to the Services is not passed by without experiment and testing.

THE COST OF FIGHTING SERVICES

The ingredients which the Services require for expansion have been considered only in quality, not in quantity, but even to include all these elements must mean a formidable bill for defence.

Let us turn to the opening paragraph of this paper. It is a quotation which the downfall of its author and the utter destruction of his country has proved to be very nearly right. The main theme of this paper has been to show that in organizing the fighting services of a country for expansion in war there are principles to be followed which the details of organization and demands for quantity may well obscure. The most important of these principles is that a nation must have a fighting spirit and a large number of leaders, otherwise its fighting forces are not worth expanding.

If the Services can give the whole nation the lead in this, then the money spent on them must be regarded as of educational benefit to the whole race, and not just as a part of the Defence budget. India's next fight for freedom will not be in the political arena. To keep that freedom through a total war she will have to fight in the field, in the air and on the sea, and in the deserts and jungles. Although she cannot provide herself in peace with all that she will require for war, she can see to it that all essential components for expansion have in peace some embryo from which they can grow.

A Defence Minister would always like to have from his expert advisers a plain statement of the forces required for the defence of the country, with a clear estimate of their cost. If the Defence Minister can tell his experts that the country expects to be attacked by a specified country in one year's time, the problem is a simple one, for the forces which would be adequate to deal effectively with a known threat can be calculated. But it is just this information which neither the experts, nor indeed the politicians, ever have.

With the elimination of Japan, and with a successful outcome of the United Nations Conferences, the defence problem before India would appear to fall into three parts:

(a) The disarming of the North West Frontier tribesmen, and the organization of India's police forces for frontier and internal security roles.

(b) The provision of a regional contingent available for offensive action under the United Nations.

(c) Basic provision for World War III should the United Nations fail to preserve world peace.

If the principles put forward in this paper are correct, then India should ensure that the organization of her regional contingent is consistent with her total expansion for a third World War.

But the quality of a fighting force must come before its quantity. It is the morale of the men and the spirit of their leaders which are above all else of most importance.

Whatever size the egg may be, it must develop into a fighting cock with sharp spurs.

SHORT LEAVE IN ENGLAND *

BY LIEUT.-COLONEL E. H. P. MALLINSON.

I hope this article will be useful to those fortunate officers about to take "Stiff" leave in England. I say this in spite of the excellent article on "Air Trooping" in the October number of the *Journal*, as my experiences of Air Transport Command differed considerably from those of the writer of that article, while I shall deal more fully with the actual leave in England.

I will pass quickly over the journey Home, which we did by B. O. A. C. in complete luxury and under most efficient arrangements. Suffice it to say that fifteen of us left Karachi early on a Monday morning and were deposited at Hern Airport on the following Wednesday afternoon about 2-30 p.m. We travelled in a Dakota fitted with most comfortable chairs, in which one could lie back and sleep, and which could be converted into "Mae Wests" without difficulty in an emergency.

We touched down for refreshments or meals at Shahjan (Persian Gulf) and Istres (near Marseilles) and spent nights at Cairo and Malta. All our kit was at our disposal during the whole journey, and the crew went out of their way to be courteous and helpful throughout the trip. I might say that at Hern everything possible was done for us, even to the extent of booking accommodation in London, which was no easy matter as we arrived on V. J. Day. There was no trouble with the Customs and we travelled up to London in a special Pullman train feeling "God's in his heaven and all's right with the world."

Arriving on V. J. Day on first sight looked a good thing. But in fact it was far from it. Those of us who were spending the night in London, as I was, had a far from joyful reception. B. O. A. C. had with great difficulty found beds for us, all in different hotels, and on arrival at Victoria we had the greatest difficulty in getting transport to take us to our hotels. The few taxis that appeared were snapped up before they reached the station, and we looked like being stranded for the night. However, we eventually persuaded the R. T. O. to produce a truck, which deposited three of us and our kit at our respective hotels. I seized the opportunity to get the R. A. S. C. driver—who, incidentally, had been on the job since 6 a.m.—to take me to Waterloo next morning.

Having at last reached my hotel, I had a bath and changed, and then walked into the dining-room, anticipating the delight of my first dinner in a London hotel after 12 years. Nothing doing. It was just 9 p.m., the closing time for dinner, the waiter was busy cleaning up—and no doubt anxious to celebrate victory—and I couldn't get a bite. So dinnerless and clad in battle dress and a bush hat (having come straight from Burma I had nothing else)—I decided to have a look at Piccadilly.

^{*} Having recounted our own experience of "Air Trooping" in the October, 1945, issue of this Journal it is only fair to give space to the experiences of others, and we are accordingly publishing this and the following article, in order that members may read for themselves how experiences vary. Both these contributions are extremely interesting, and, like our own, mainly factual.—Ed., U. S. I. "Journal."

My hotel was near Sloane Square and I jumped a bus, which took me as far as Hyde Park Corner. I had to get out and walk here, as no traffic could move in Piccadilly. A madly excited mob, mostly arm-in-arm, was all that could be seen of Piccadilly, and the odd stray car that tried to get up or down had a rough time of it. Unfortunately I couldn't produce the necessary hilarious mood everybody else seemed to be in. No doubt the fact that I had left Malta at 5 a.m. that day, and had an empty tummy—empty of food and drink—had something to do with it. Moreover, being 6'-4½" I felt uncomfortably conspicious in my battle dress and bush hat.

However, I determined to see it through and joined the throng making for Piccadilly Circus. Before I got there I was biffed on the head by a large flag and embraced violently by a huge Amazon. This was more like it I thought, but I was now almost at the Circus and unable to make any headway towards my new-found admirer, who was quickly swallowed up in the crowd. In Piccadilly Circus it was almost impossible to move, and after several near misses from the British equivalent to marriage bombs I fought my way out, and eventually reached the comparative peace of the Green Park.

Here quieter and more intimate forms of celebration were in progress, and after catching a glimpse of the glow from flood-lit Buckingham Palace I decided to make off in that direction along Constitution Hill. But there was such a tidal wave of humanity streaming the opposite way—the King and Queen having just made their final appearance on the balcony—that I gave up the unequal contest and made for home. By this time all buses had long since disappeared so I walked all the way back to my hotel.

Next morning I got a shock to find my bill for bed and breakfast was 25s. However, my readers will be relieved to know that this was the exception rather than the rule. The normal charge is about 10/6. Hotel accommodation is by no means easy to come by in London. If you wire or phone to several hotels you invariably get a "full-up" reply couched, of course, in most polite language. But I heard of many cases of officers getting accommodation by going to the hotel and hanging about until one could get the private ear of the Reception clerk or see the Manager himself.

I went up to London myself later with my boy without having made any definite arrangements about accommodation. At Waterloo an efficient lady at the Information Bureau got me a double room at the Lonsdale Hotel, Montague St., Russel Sq. I can recommend this hotel. It is bang in the middle of London and yet in a quiet neighbourhood. Buses are handy, in St. Russell Sq. Underground Station is five minutes walk away, and taxis are usually obtainable. Only bed and breakfast is provided—as in the case of most small hotels—at a charge of 10/6, but there are two good eating places, where I never had to queue, a few minutes walk from the hotel. Owing to linen and laundry difficulties this and most hotels prefer clients who stay for three or four nights rather than only one, but the Lonsdale Hotel will usually stretch a point here, while it caters chiefly for military officers.

Good eating places are not difficult to find in London, where you can get a decent meal at a reasonable price, without having to queue; provided, of course, you avoid the popular Lyons or other such establishments. Buses are frequent, and their "Clippies" usually efficient and helpful; but you can't often ask a policeman which bus to take or anything else, as there are very few of these excellent gentlemen about. The Underground is profusely posted with clear

directions, which are practically fool-proof, though a pocket map of the Underground railway system is a very useful thing to have with you.

So much for London and a dashed good place it still is.

As regards living in England, the country has great advantages over the town. A family of three or more living in the country has no difficulty at all with rations. In Devonshire, where I was living with my family, we always had plenty to eat and ample variety, too. Milk, as much as we wanted, was brought daily to the house, the local baker also called daily with bread and buns, while the grocer brought our requirements for a week every Saturday. Fish was sent by bus once a week from Ilfracombe 3 miles away, and meat could be obtained in the village once a week. When we went into Ilfracombe to do other shopping we never had to stand in a queue. I cannot vouch for this, in all provincial towns; in fact, I know that in Winchester queueing was the order of the day, especially at fish shops.

The housewife's lot, however, even in the country, is not a happy one. We were luckier than most in having an efficient woman to come in daily, cook two meals and keep the house clean, but her wage was £2-10 a week and she lived out. All the same, there was tea and supper for five and plenty of washing-up to be done apart from various daily chores which the daily woman hadn't time to do in her 3—4 hours. But most housewives, in country or town, spend a great deal of their time in the kitchen and with their noses in the sink; and after life in India this is far from pleasant. I know what my wife thought about it anyway, when the daily woman took a week off (these people invariably "take" holidays without bothering to ask).

On one occasion when my boy and I came back from a jaunt in London a day before we were expected, our reception was far from cordial. My wife was in the kitchen, where she had been most of the day and the greeting we got was—"Why on earth have you come back to-day? That means two more suppers to cook, not to mention two more breakfasts to-morrow, even if I can find the food." I might mention that it is important with the rationing system, to know exactly how many mouths are to be fed each day. Needless to say, we had an excellent supper and a good breakfast next morning. Such are our women. All the same we were not a bit popular.

Clothing is still difficult to get at Home and rationing severe. However, all officers on "Stiff" leave from India get 130 coupons, which should be ample for all requirements. There are only about 15 "Special" coupons, amongst the 130, which are earmarked for specific mufti clothing such as grey flannel trousers, mufti shirts, collars, ties, sports coats, etc. But you can present the other 115 coupons for all sorts of clothing besides uniform, such as raincoats, cardigans, pyjamas, underclothing, etc.

You can't get clothes made in a hurry; four or five weeks being required for a sports coat or rain coat, and about three months for a suit. However, if you are of normal size most things can be obtained "off the peg," and Moses Moss can supply almost anything and anybody with all kinds of uniform. On reporting your arrival in the U. K. to the India Office all ration-books and clothing coupons will be forwarded to you. It is not essential to report to the India Office in person, though a good thing to do on your first visit to London.

It is interesting to notice how well-fed and well-clothed the people in England look, in spite of the rationing system. But actually the rationing is the reason for this high standard. The food ration provides a well-balanced

and nourishing diet, far more beneficial than the housewife would normally provide for herself and her family, while military clothing is of good material and well-cut. It is only human to use up all the coupons issued, otherwise you feel you aren't getting your money's worth. Hence a well-fed and well-clothed people in spite of all they've been through.

Travelling now in England is by no means luxurious, but it is not at all bad. All officers can travel 1st or 3rd class on half fare; and, if they get the necessary form, their families can do the same. It is advisable to be at the station at least 40 minutes before any main line train is due to start in order to get a decent seat; but if week-ends are avoided there is little discomfort travelling by train.

• Cars are not easy to get and petrol is still strictly rationed. Officers I did hear of who had obtained cars (usually second-hand) had friends in the trade or were lucky enough to find somebody living near them who wanted to dispose of a car.

The house problem is the very devil. Having booked rooms in Devonshire for April, my wife was unavoidably delayed in India and didn't arrive in England till May. She sent a cable to the landlady informing her of this delay. When she arrived with two children at her destination in Devon, the landlady said she hadn't had the cable, and had let the rooms. My family was thus stranded, but very luckily managed to find a large bungalow not far off which was adequate for the summer. An Indian Army Colonel's wife with five children was also stranded with nowhere to live, and my wife managed to squeeze them into the bungalow too.

Houses with five or six rooms stand at prohibitive prices; even in remote N. Devon they were being sold for £4,000 and £5,000. Rents are equally high, owners of similar houses asking £6 a week, and getting it, so great is the demand. This house difficulty is undoubtedly the biggest problem confronting the family man going on "Stiff" leave, and he will be well advised to get in touch with a friend or relative at home as soon as possible to do what he or she can on his behalf.

There are houses to be bought at reasonable prices, as I can testify, having personally been lucky enough to buy one at the very end of my leave, but they are few and far between. Incidentally, if one does happen to come your way it is worth knowing that, if you find a Bank to lend you the money you don't pay Income-Tax on the money the Bank advances you. So instead of paying a fat and confortable landlady an exorbitant rent you pay the Bank instead and own the house at the end of it. But you have got to find the house first.

Now for the journey back to India.

Towards the end of my leave I visited the India Office and was told that I could bank on getting 10 days or so over my 61 days. This, of course, was most useful and pleasing information, and enabled me to pay a visit to Scotland after my 61 days were up. When I'd had about 70 days I was ordered to report in London at a definite place and definite time "ready to proceed by air". Most officers actually took that to mean that they would be off that day and made arrangements accordingly.

All the officers I saw arrived with their complete kit at some inconvenience (it happened to be a Sunday) and had said good-bye to their wives and families. But as far as I know not one officer went off that day, and after filling in umpteen

forms and being medically examined we were told to report again on the following Tuesday or Wednesday. This suited my book as I was able to go off with my wife, who had fortunately come to see me off, and buy a house. But some officers had come a long way and had to make the best of the accommodation on the premises, when they might have had three more days with their families.

On the following Wednesday, not long after reporting, we were packed with our kit into M. T. and transported to Bourn Airport near Cambridge. Here we spent a reasonable night in R. A. F. barracks, thirteen to a room, with nothing worse to grouse about than cold water for washing and shaving, and breakfast at 07.45 hours.

Next morning we were whisked off to Tempsford airfield where we were packed with our kit (so we all hoped) into a Liberator, and fitted with Mae Wests. Crammed with 25 others into a Liberator Bomber is not an ideal form of travel especially for those cooped up in the belly of the machine or those up aloft unable to stand up without banging their heads on the roof. However, the "kite" was steady and the crew efficient, and in 7 hours or so we had touched down at Castel Benito in Tripolitania. We had a comfortable night here, four to a tent, and even enjoyed the luxury of hot water in the morning.

Off next day to Lydda in Palestine, where we arrived after dark at about 2000 hours. Six to a tent here, beds with sheets and blankets, but no pillows. We were told that we would be there for 48 hours at least, and could visit Tel-Aviv and Jerusalem, if we wished, the following 2 days, transport arrangements being laid on. This is a well-run camp. A variety of reading matter is provided, one can write letters in comfort, there is a swimming pool, and as already mentioned, efficient arrangements are made for visits to Jerusalem and Tel-Aviv. The day after our arrival we spent pleasantly enough according to our tastes and there was no sort of warning, not even a rumour, that we should be moving before the evening of the next day. In fact the 48 hours stay was taken as read.

But our luck was out. At 0300 hours next morning we were rudely awakened by an N.C.O. of the camp staff and told that we had to get ourselves and our kit into lorries waiting by the Mess within 15 minutes, and that there was no time to wash or shave. This was a bit sudden. However, it had to be done and certain officers cursed themselves for having more kit than they could carry to the M. T. in one journey; poetic justice no doubt, as they obviously had a good deal more than their 65 lbs. allowance.

We were given a scratch meal before leaving the camp, and then transported to the airfield. Here neither the plane nor the crew were ready, and we hung about for hours, with difficulty restraining our feelings at having been turned summarily out of bed at an unearthly hour for no apparent reason. Two officers had stayed overnight in Jerusalem and were left behind, and several officers had sent clothes to the *dhobi* the day after arrival at Lydda, which of course, they never saw again.

Incidentally at Lydda five unlucky officers found that all their kit, other than what they were carrying with them, was missing and nobody knew anything about it. It had been collected at Bourn with all the officers kit, but somehow had not been put on the plane. We eventually became airborne about 0830 hours, and after an uneventful and monotonous journey of 10 hours reached Karachi about 2130 hours I. S. T.

After dumping our kit in one truck and ourselves in another we were driven to a camp, where we were issued with sheets and blankets and allotted a

berth in a colossal dormitory which could accommodate 120 officers in bunks arranged in tiers of 3. We had a locker for our kit, and if you don't mind stepping on other people's faces when climbing into bed, or having your own stepped upon, perhaps twice, everything was hunky-dory.

In this camp the feeding arrangements were communal. This entailed officers queueing up with the troops, sometimes for about half an hour, grasping a plate, knife, fork and spoon and receiving a dollop of spam and baked beans in due rotation. Whether it is a good thing for officers up to the rank of Lt.-Colonel to scramble for their food in this fashion with the troops is to my mind very doubtful. Perhaps there is no harm done over a few days in a transit camp, or perhaps it is the future policy of the new Labour Secretary of State for War. Anyhow, it was not popular with the officers in the camp, who for the most part had their meals in the canteen, a well-run show, at their own expense.

At this camp we were given posting orders and despatched by air or rail to our final destinations within three or four days. There was no sign of the missing kit, and as some of the officers concerned had only thick battle dress or serge uniform they had to exist in extreme discomfort or get a local durzi to make them some cool clothing. Most of them had decided on the latter when their kit suddenly turned up, having come on another plane. One of the officers had already gone off to Delhi and let's hope his kit eventually reached him.

So ended our journey under the auspices of Air Transport Command. Perhaps we were unlucky, and judging from the article in the October number of the Journal, we must have been. But with the number of bodies passing through their hands and with the very limited staff at their disposal, not to mention a World War only just "off", the authorities have a tremendous job to contend with. Anyway, I hope this article will give intending "Stiff" walas some idea of what to be prepared for, both en route and at Home, and I hope this journey of mine won't put them off.

For my part I'm hoping to do it again this year on whatever leave I can get.

DIARY OF A "STIFF"

By LT.-Col., G.L.W. Armstrong.

SO here it was at last—the Move Order which would take me home on leave to the U.K. after seven years in the East.

The signal arrived on Monday morning, and after four breathless days of packing and completion of documents, Friday morning saw me on the way to catch a 'plane'. Bad weather intervened, however, and it wasn't until the following Wednesday morning that I was airborne from Colombo. Here my diary takes over.....

7 November.—Away at last! Airborne over Colombo at 7.15 a.m. and landed at Karachi in time for tea....reception and organisation at Mauripur transit Camp good—even to a hot meal at 6-30 p.m. before we returned to the airfield to take off again at 8 p.m.

8 November.—Landed at Shaiba 2 a.m. for a 2 hour halt; bitterly cold, and bacon, chips and hot tea in the Station Buffet most welcome. A couple of locals selling cheap silverware by candlelight outside the hut—not much sign of trade.

Another uneventful hop in our comfortable (if noisy) York and we were in CAIRO in time for breakfast at 9 a.m. excellent breakfast in the R.A.F. buffet on the airfield......

Off again at noon—first sight of the Pyramids which gave the impression of resting on clouds—flight across N. Africa most interesting—thousands of wheel tracks—occasional entrenchments and groups of derelict vehicles—Benghazi apparently deserted—pleasant flight over the sea to Malta. . .

First impression of Malta: a large airfield with houses between the runways. As we came in to land it became apparent that much of the bomb damage had still not been cleared up or repaired touched down at Luqa airfield 4 p.m. reception arrangements were excellent and we were soon dealing with a large tea in the R. A. F. Transit Mess. It was a pleasant change to find beer unlimited and Scotch sold freely over the bar. dragged out of bed twice to be told finally that I had been unloaded off the aircraft to make room for more petrol—admiring R. A. F. Corporal listened with awe to my language!

9th November.—Occupied myself with stroll around town of Valetta (capital of Malta) . . . much bomb damage; many idle men hanging about the streets. Shops full (clothes mostly second-hand). Main impression was of

a large fortress overlooking and guarding the Naval Base.

10th November.—At last! Just as I thought that I would be in Malta for ever, I was told of a seat on a York freight 'plane leaving for the U. K., and by 3 p.m. we were airborne. Mattresses were provided for the passengers, making us much more comfortable than in the seats provided in passenger 'planes . . . A quiet flight, and we touched down at Lyneham (Wilts) at 11-30 p.m. . . . reception arrangements once more excellent and after "char and wads" at the taxpayers' expense on the airfield, we were taken by bus to Bowood House, the R. A. F. Transport Command Guest House. . . hot meal ready for us on arrival there, and then to bed.

11th November.—Up again at 6-45 a.m. for breakfast before embussing for London at 8 a.m. . . . arrived Victoria 11-15 a.m. and caught 11-30 a.m. train from Waterloo to Bournemouth, arriving there just before 3 p.m."

Perhaps the first impressions of a homecomer who has never seen Britain in wartime may be of interest.

Bournemouth is, on the whole, unchanged. There are, of course, notable gaps—The Metropole Hotel, Beales, Woolworths, and Wests' Cinema are gone: the result of uninvited visits by the German Air Force. The streets were full of the Royal Canadian Air Force and the Royal Army Pay Corps. Residents may also be seen if one looks closely. The shops are full, but mostly of trinkets and knick-knacks at high prices—many of the things one wants are still unobtainable. Queues form outside shoe shops before 8 a.m. and the small daily quota of shoes is soon disposed of. Supplies of beer are adequate (except for the thirstiest!), but spirits and wines are almost unobtainable.

Other points which have caught the eye include the smartness of the average soldier when dressed in the recently approved collar and tie with battle-dress, the utter sloppiness of the "cowpat" beret, the small value of one's pound note, the number of soldiers to be seen wearing bush hats, 14th Army flashes and other formation signs familiar in India and S. E. A. C. (Incidentally, is the

"S. E. A. C." shoulder title, worn by so many soldiers on their return to the

U. K., officially authorised?).

The returned prisoners and internees from the Far East whom one has met all seem to be making wonderful recoveries—they have put on weight extraordinarily fast, and are most cheerful. Wherever one goes at the moment, one sees houses decorated with flags and banners reading: "Welcome Home John from S.E.A.C." or similar inscriptions. The recently returned troops of 2 Division have had a grand reception, and the familiar "crossed keys" are seen frequently. I saw one hopeful in Boscombe the other day with a piece of mistletoe stuck in his bush hat!

A point which all Lt. Cols or below coming home on leave should note is that they can obtain through Service channels, for their own or their parents'

cars, extra petrol for 300 miles for each month of leave.

London has some first class shows running, and there is ample opportunity for dining, wining, and dancing (at a price!). Hotels are crowded, but usually find room for Servicemen, and the taxi problem now is comparatively easy.

Highlights of my trip to town:

Asking a policeman the quickest way to the Palladium. Answer:

"I'm sorry—I don't know"!

Being offered a bottle of hock for 6 guineas.

To sum up, it was a grand trip home, I'm having a first-class leave, and those pessimists who say England is not worth coming on leave to, are talking through their hats!

P.S.—Information which is unobtainable before leaving India or S.E.A.C.

"How to get a ration card."

The answer: From the India Office (not as I did, through my local food office—that's cheating!).

ANOTHER VIEW OF HOME.

The wife of one of our members who has recently gone home writes:

"We had a very good trip home on the "Strathaird." It was extremely comfortable. We had a single berth cabin converted to ourselves. The stewards and stewardesses were very helpful, and the food was excellent.

"England—well, it is quite wonderful!! Rations are definitely short, and in consequence everyone is on rather a starchy diet and fills up the corners with cakes, buns, potatoes, bread, etc. We are, of course, right in the heart of the country now, and it is easy to gets eggs, milk cream and fuel, but people in the suburbs of large towns have a difficult time.

"We went up to London for a day after our arrival, and it is just the same and at first glance does not seem so battered, but, of course, one soon realises there are chunks missing. It is incredibly shabby, and people wear any old clothes, but they are wonderfully polite in the shops, on buses and tubes, and even taxi drivers are cheerful (when you manage to get one). Porters again are a little short, but we have always managed to get one and they were all cheerful and obliging. Of course, down here in the country everyone is delightful, and calls out "good morning' or 'evening' as the case may be.

"The servant problem is serious, but there are more available now, and in a year things should ease. Most people have 'housemaid's hands' due to six years of household drudgery. I think one can get servants now if you can offer them a labour saving house near a town for cinemas, etc. and are prepared to pay good wages."

SINEWS OF WAR AND ALL THAT

BY LIEUTENANT-GENERAL K. M. LOCH, C.B., M.C.*

Master-General of the Ordnance in India.

MANY years ago Shakespeare came to the conclusion that "all the world is a stage." This thought seems a good line of approach to my subject. Can we not appositely compare a campaign to a stage production or series of productions each calling for rehearsal, direction, a suitable cast, stage managementship, and last, but by no means least, adequate provision of properties? As far as we soldiers are concerned, our production and direction is an affair of the Commanders and General Staff, our cast of the Adjutant-General, our stage managementship of the Quarter Master-General, whilst the property man is the Master-General of the Ordnance.

Experience suggests, however, that when setting about staging our military play we may well be confronted with one or all of the following somewhat disconcerting conditions:

First.—The syndicate backing our venture, namely, the Government, may be a little vague as to the nature and scope of the production they require, and for that matter when and where they propose we should open—not necessarily their fault but nevertheless a bit tiresome for the company.

Secondly.—When the curtain eventually goes up the actors find themselves in quite a different play to the one they have been rehearsing.

Thirdly.—When Act I has gone a bit wrong and the audience are clearly somewhat restive, the actors call for entirely new properties to sustain Act II.

Most of you in the last few years have known what it is to find yourselves on a strange stage and in strange roles, but with your admirable versatility you are now emerging successfully from your six years' contract. A lot of you have been stage managers and known the anxieties of getting your company to the right place, of shifting the scenery and generally of having to cope with the vagaries of circumstances and sometimes perhaps even with a somewhat temperamental cast. A few of you, in fact only a relatively limited number, have been in the property business—a business which in modern war has greater significance than is usually realised.

We have got to get the right properties—without them our final curtain can only be a swift and tragic one. To ensure them in adequate quantities and at the right time is a problem which bears directly on nearly every activity of a modern State, and cuts deep into the economic blood stream of a nation.

In our lifetime, in fact within the last 30 years, the Great Democracies have twice had to fight for their very existence. On both occasions success has been achieved with but little to spare, and only after a prodigal expenditure of lives and treasure. Common to both these experiences has been the necessity for staving off defeat until our technical skill and industrial effort could be fully brought

^{*}In a lecture.

to bear in support of the Defence Services. It is thus of prime interest to study this problem of gearing up technology and industry to the war effort, whilst events are fresh in our memory.

Our enemies, more particularly Germany, on both occasions have started the campaign with a preponderance of industrial war potential, built up for the occasion, and also a fair measure of technical initiative—by initiative I mean, of course, superiority, which guarantees freedom of action. Over a not inconsiderable field we held the initiative in technical matters, despite our unpreparedness in other directions. Our trouble was not having the means to translate this advantage into large-scale production before the need arose.

Our enemies contemplated a short war. Once this hypothesis was shown to be false, they were faced with a decline in their comparative superiority in the production field, and as events turned out, with an almost complete loss of technical initiative, a fact brought into shrill emphasis by that remarkable development, the atomic bomb.

We should not, however, leave the matter at that, merely attributing our enemies' discomfiture to the argument that given time to develop, the preponderance of Allied war potential was bound to prevail. There is more to it than this, and we should take gratefully into account the fact that our enemies' undoing was certainly hastened in a large measure by a rigidity of outlook and a consistent failure to establish what our psychological experts call the correct group relationships between the fighting man, the scientist, the industrialist, not to mention the economist.

Why our enemies failed in this respect would go far to illustrate my views, at least in terms of what we should avoid. Suffice it to point out some of the villains of the piece: a General Staff living in a world of 1914-18, once the period of initial success was over, and above all isolationists to everything outside their immediate purview; Marshal Goering, with all the glamour of head of the Luftwaffe—how lucky for us it was merely a head, but not a brain! Again, Keitel, who everyone in Germany seemed to agree was a mere post office of Hitler, but one calculated to ensure the wrong delivery of the letters. A hide-bound bureaucracy, hard-working and sincere enough, but with an arrogance towards anyone outside their own caste. Then a crowd of super-industrialists, scientists and what not, who were rarely if ever allowed the speaking part which their importance in the drama justified—at least not until too late.

Behind this all, the almost pathetic figure of Hitler, who seemed to have sensed what was wrong but could not put it right, despite his brilliant henchman Reichsminister Speer. No satisfactory cohesion in those vital spheres links user, scientist, technician, industrialist, etc., whereby alone the economy of a country can be harnessed effectively to the war effort. Here is the stuff of those murky Wagnerian dramas, so dear to the German. To quote a very old saying "He whom the gods wish to destroy, to him they first send madness." Let us be thankful for this madness, for even with it the forces arrayed against us were formidable enough.

With regard to ourselves, it is a truism that we can never hope to be so fully prepared for war at its outset as our enemies, with their free acceptance of war as an instrument of policy, to be applied by them in a predetermined manner. We must perforce, rely on our powers of rapid expansion, and in so far as we cannot be physically prepared to the extent we would like, we must at least ensure the necessary machinery and organisation to expand with the greatest rapidity

possible. This is doubly so when development in the air and so on have rendered it feasible for an enemy to interfere with such expansion to an ever-increasing degree. More than ever the technical initiative must be ours.

A study of the last two campaigns indicates that this co-ordinating machinery—soldier, scientist, industrialist and economist—was by no means perfect on either side. Where we had the advantage, despite being late starters, was that we were prepared to adjust our ideas as circumstances dictated. Not so our enemies. Nevertheless, there is no cause for complacency—we did not make up the lost ground as soon as we might have, and thereby the balance might well have been tilted against us.

In the stress of war it is difficult to affect changes of organisation smoothly and expeditiously. It follows that only in the comparative leisure of peace can we sow in a manner to guarantee a bumper harvest. As regards our subject of "properties" the seed we must sow is not on military ground alone—it must take root over the wider field of Government as a whole. That is our problem—inadequately solved in the past, and may well be so again in the future, unless we clear our minds as to the issues involved and their ramifications.

Napoleon had a dictum to the effect that "one manoeuvres only round a fixed point" meaning by fixed point a secure base. This dictum is as true to-day as it was over a century ago, only that now with the more comprehensive nature of war this base is not a purely military affair. It is the national economy in its widest sense. That is what we must ensure—the economic front. It follows that our first task must be to obtain a clear view of what is necessary to sustain this economic front—raw materials, industry, transportation, finance and so on. Of course, in any case we want an intimate knowledge of all these matters for purposes of normal peacetime government, but the problem in war is to know how far we can extend these activities whilst ensuring the minimum requirements of the civil economy. The measure of this possible extension is a direct measure of our possible war potential.

Accepting this argument, how do we assess all these factors? Firstly, as to the minimum required over the whole field of activities in order to sustain the civil economy. Once this essential minimum for the civil economy has been determined—no easy matter—the next step is to see what remains for our wareffort. This involves not only a knowledge of our resources in any particular field, but the problem of converting them to the needs peculiar to war.

Had we, or for that matter anyone else, on the side of the Allies, fully adequate machinery for obtaining all the necessary data and for utilizing it smoothly and expeditiously in the furtherance of our cause? On the whole I think not. I merely want to state facts as I see them. To quote one instance in my own experience. Some years before the war it was necessary to plan the Air Defences of Great Britain in detail—an essential part of the project being to know exactly what were the vital points to defend.

There were clearly a diversity of these points. They lay in many fields, but mostly related to sustaining the economic life of the country. A comprehensive review over transportation, production, communications, etc., had to be made and as things turned out, it meant in practice a start almost ab initio. No full survey existed, nor had the necessity for it been realised. Out of this review emerged a great deal of matter pertinent to my argument, for instance, in some cases over-concentration of vital industry, i.e., too many eggs in one basket and in others hardly an egg at all.

What sort of machinery do we want for all this?

Our first requisite—and I am convinced this goes for peace as well as war—is for a Government to have adequate and up-to-date statistical data to see where it stands over the whole field of its economy. In peace this should enable the Government to see how best to plan general progress. In war and preparing for it, we want to assess what is essential to sustain the civil economy and what portion of our resources can be devoted to Services requirements. From this initial conception clearly arises the need for being able to interpret this statistical data where necessary into swift action, and again implicit in this is co-ordinated as opposed to unilateral action.

Arising from the above are the more specialized requirements of war in relation to the Services. This calls for a planning staff beyond the usual conception of planning this or that operation. It must constantly review the whole field of economics in the light of the possibility of war. This is no war-mongering outlook, but merely common prudence, until such time as war is eliminated from human affairs. Such reviews must cover supplies of raw material, production capacity, transportation, etc., and it is up to these planning staffs to draw attention to gaps in our economy wherever they may be. Experience shows that sometimes these gaps lie in most unexpected places. Be that as it may, this form of planning must in part be a Services concern, since they alone know what is required for the military conduct of the war. However, purely Service representation in these matters will by no means suffice—too much is involved.

The broad principle which I suggest emerges from this argument is that in future we want on one hand a civil administration with a greater general knowledge of the nature of war, and on the other Service personnel with a more highly developed sense of the economics of war. In fact, the nature and scope of modern war dictate that the civilian and soldier should think more and more in harmony on such matters and hence speak the same language.

* * * * * *

Granted that we have our basic machinery for the conduct of war, how are we going to make use of it for the immediate requirements of the Services? To revert to our stage analogy, what properties do our actors want, and how do they propose getting their dramatic effects—sword, dagger, poison, pistol, bomb or what not?

We are all rightly told as soldiers to study the principles of war, which are set out in many a military classic. We must, on the one hand, contrive to produce equipments with the maximum lethal effect, and, on the other, with the maximum protective qualities—these not against bullets alone but against disease, heat, cold, discomfort and all other causes of despondency. This is where the scientist and the technologist come in, as servants of the property man, who is in turn the devoted servant of the players—or should be.

What is the problem? The General Staff or equivalent staffs of the other Services, state a requirement designed to enable the troops—to quote Ravelais—"to give blows without receiving them." At this stage it is merely a requirement set out in the most general terms—for instance, a weapon which is to have this or that limits of range and this or that mobility. Even so, it is not always a simple matter. I remember a rather harassed technical expert on guns exclaiming, "As I see it, what is wanted by the General Staff is the mobility of a fire brigade and the broadside of the 'Lord Nelson',"—a particularly improbable aspect of technical wedlock. All we property men ask is that the requirement

should not be "crying for the moon" or that the expected period of gestation for the idea should be reasonably adequate—do not ask for something new by next Monday. That is all that is necessary, and a good property man, suitably supported by his technical "brains trust," can then carry on to advantage.

The ball is now in the property man's court. He has got to do something about it, but what? Positive action is asked for. At this stage he must call in the Services technologist. In the Services we require scientists for three main reasons and all of these are related to research, and all very necessary to our military health.

Firstly, our operational staffs must be kept in touch with all that scientific development can offer to the solution of the military problem. It may well be that research may be directed towards a cure for, say, cancer, and from it may emerge something of application to our military needs. As soldiers we may not have the highest ethical role, but it is our concern and bounden duty to see whether research over the whole field of science, no matter where it is, does not offer something which will enable us better to give blows without receiving them.

Secondly, a General Staff requirement may call for specialist knowledge in certain directions, which our Services technologist is unlikely to have. It may involve some research, for which the Services have not the resources. An example of this is the V2—the long-range rocket. Both the type of fuel to be used and its direction during flight, to name but two essential ingredients in the solution, called for highly-specialised scientific knowledge and research.

Thirdly, we want the scientist or the trained scientific mind in order to study what I call "behaviour". By this I mean an analysis of happenings over the whole field of military activities, whereby past experience can be projected into future action of an appropriate type. From our search into the past and present we must make military events cast their shadows before.

In short, in our military organisations the scientist has come to stay, and rightly so. His representation is essential to our military welfare. His full value in a military organisation, however, can be developed only if he is also represented over the whole field of government, and in a manner whereby scientific development and all it stands for permeates the whole of the State and in a co-ordinated manner.

The Services technologist is merely an officer with a high measure of technical training, directed towards design and development of military equipment and stores. His is the role of designing the properties—guns, tanks, clothing, etc., to satisfy the requirements of the user. In the future, whilst the regimental and staff officers must have an expert knowledge of warfare and a greater general knowledge than heretofore of matters technical, our technical officers must have a thorough and expert knowledge of matters technical and also an increased general knowledge of warfare. This is essential, as we do not want a generation of technical "back room boys," who know nothing of the brave display in the shop window.

Let me develop this theme by tracing out what really happens between the expression of a requirement by the General Staff and its technical translation into an equipment or what not in the hands of the troops. Of course, there must be interplay of ideas all along the line—user, scientist, technologist, manufacturer, etc., but to demonstrate my point I will divide the activities, somewhat unreally, into rigid compartments. The "user," i.e., the General Staff wants, let us say, a means for destroying a strong point in jungle conditions. The technologist, seizing on to the idea, suggests an answer in terms of say, a recoilless gun or a rocket with appropriate mobility. After mutual consultation—user, scientist, technologist—there is general agreement that the answer is a particular type of gun mounted on a jeep. The technical solution must be one in which the factor of ease of production has been given due emphasis. It is no good suggesting a "Rolls Royce" solution, when all that is available is some bits of old iron and the village black-smith. Any major development, even in war when all technical and industrial talent can be harnessed to the war effort, is and must be a lengthy business—not a matter of weeks, even of months, but more likely of years.

It wants considerable strength of character on the part of the technical authorities to resist the natural impatience of the user. But it is the height of folly to issue to the troops an imperfect design of equipment wanting in essential qualities. "Give a dog a bad name"—once that happens you will never persuade the "user" world that a new equipment is not so bad after all. Bad equipment or what passes for it is the negation of morale. This fact all gives emphasis to the principle that we plan technically to best advantage in the relatively leisurely times of peace, and we should be given every facility to do so —otherwise we lose the technical initiative. In future warfare we may well have no opportunity to recover from initial technical shortcomings.

To revert to our main argument. The technologist is now well away. The next stage, after a spot of bother on the drawing board and elsewhere is the construction of a few pilot models. These then undergo "user" and "technical" trials, to see if the equipment is what is wanted. We will assume that after relatively minor modifications we have got the answer agreed to by both parties. At long last we have got a winner, or we think we have, and we decide to equip our forces with what we have evolved. Industry grinds out the hundreds of thousands required and the troops get the new weapon. If that were all and perfection had been reached there would never be the need for Mark II equipment. We have been running a difficult race—we have not got to the winning post yet. When we have a large clientele of users they will certainly raise objections to our solution and in certain conditions technical disabilities may be revealed despite our previous trials. This is only what is to be expected.

Our technical officers must watch the behaviour of the new toy in the field. The user, being as a rule a simple soul, voices his discontent in honest Anglo-Saxon adjectives. Whilst these serve as an indication that something is wrong, they rarely suggest a cure. For this we have to look elsewhere and that "elsewhere" is to our repair organisation. They know how the shoe pinches—a workshop cluttered up with broken springs and what not. Herein lies their value in this argument; they can both diagnose a technical fault and as often as not suggest a cure—no one else can so readily do so. To me it seems obvious that our repair organisations are a logical component of all those technical activities, which if properly integrated go to make a successful equipment—without this integration we shall be unnecessarily at a disadvantage.

We have now developed our conception of the military technologist in his relation to his military comrades. Next we must examine the other half of his make-up, which deals with industry. As I have tried to emphasise, in war there can be no sharp dividing line between these worlds—they are both prime ingredients of victory.

I gave a clue to what I mean, when I wrote that military design must give emphasis to ease of production. Whence can our services technician obtain this knowledge? Only by practical experience of what production means. When expanding for war we must recruit from industry through some sort of special reserve, set up in peace. Our regular technical officers must, however, be able to look forward into battle and backward into industry, with the confidence which knowledge of both these worlds alone can give. They must thus be given industrial experience.

There is yet another consideration which adds force to this argument, namely, the highly important role of inspection. Inspection must, however, be something more than rigid exaction of this or that specification. It must be a more elastic conception, whereby divergences from specification can be accepted, provided they do not compromise the essential military qualities desired of the particular item. That is the point—in order not to put undue strain on production we may have to accept the next best thing to what we want, but that is no matter provided it is of no real consequence to the user. On the other hand, we have got to keep production up to the mark. To strike a happy balance in this conflict of interests technical officers concerned in inspection must have real knowledge both of the essential military qualities of an equipment or store and of the problems of production imposed by its manufacture.

That is a brief picture of the birth of a weapon and the contribution of the scientist and the technologist to this happy event. The scientist has in general a consultative role and is concerned more in general concepts in their application to war. The Services technologist on the other hand, must be versed in practical experience of how to translate a General Staff specification into an actual equipment, store, or what not. Of course, the two must work in the closest touch and in the greatest harmony; but each has his separate function. It would, therefore, be wrong to suggest any rigid compartments into which their activities should be divided, but there are definite spheres of influence for both.

I hope from what has been said that you will realize the necessity for adequate scientific and technical staffs in our peacetime Services and implicit in them the need for being able to expand their cadres in war—no easy matter, since such roses do not grow on every bush.

It may be asked, where do we come in as professional exponents of the art of war? Our role vis-a-vis the scientist and the technologist is an important but difficult one, which might be not inaptly compared to that of the stereoscope, so popular half a century ago, whereby family groups, pictures of the Alps, or even of the night life of Paris could be seen in startling perspective, as opposed to the less exciting two dimensions of flat land.

In this view I am fortified by the saying attributed to Marshal Lyautey, that great French colonial administrator, when asked for the reason for his success: "I know nothing—I am an architect of general ideas." I suggest this is no escapism from an ignorance complex, but an expression of a profound insight into human affairs.

In this sphere, we are all in it. "Tinker, Tailor, Soldier, Sailor," not to speak of all the additions to the cast—scientist, economist, psychiatrists, etc.,—since that old nursery rhyme was written. They and their activities must all be harnessed to the war machine and we must so contrive in peace that we can harness up quickly when war comes. How can we ensure this in our future organisations?

First, that we should have the full statistical data as to where we stand over the whole field of national economy. We must be able to assess the minimum essential requirements to sustain the civil economy and hence to know what can be utilised directly in furthering the war effort.

Secondly, we must have plans constantly under review whereby the war potential can be developed with the minimum delay.

Thirdly, the Defence Services should have scientific representation looking inwards into our habits and outwards over the whole field of scientific development.

Fourthly, that we have a sufficiency of well-trained technologists in peace and a well-thought out plan for expansion in war.

Fifthly, that all our scientific-cum-technical activities must be closely integrated. This means the integration of research, design, development and, in my view, of production in so far as it refers to specialised military equipment.

These I believe to be the "Big Five" in our material preparations for war. Through them alone can we ensure these ingredients of future success—the maintenance of the economic and technical initiative—they are the architects to build that secure base round which our Navies, Armies and Air Forces can manoeuvre without let or hindrance.

War and its preparations are heady wines and if, amid all these brave doings, alarums, and excursions, like Macbeth you "Cry Havoc and let loose the dogs of War"—by all means do so, if you must, but please first consult the "property man."

Leadership.

"When I took charge of the armies which were being formed in Great Britain at the end of 1943 to finish off the Germans I quickly sensed a feeling among the soldiers that the job they were to undertake was not really possible. They were not confident about the D-Day party in Normandy.

"So having ensured that all the preparations were going on well, and that the plan was prepared, I set off around England and saw and spoke to every man who was to come and fight with me in Normandy. I formed them up so that I could see them and they me, and, having had a good look at one another, I used to get on top of a jeep and talk to them. The sole reason was to inspire confidence.

"A lot of people thought I was quite mad. I am so often considered mad that I regard it as a compliment now. But it did establish confidence, and the net result was that when we went across the Channel the soldiers were quite confident it could be done."—Field Marshal Montgomery.

THE FOURTH INDIAN DIVISION

THE comradeship in the 4th Indian Division was something to be seen to be believed. Recently the Division completed its work; the Indian units returned to India, the British battalions to the U.K. On February 24, however, B.B.C. Radio News-Reel devoted a part of its interesting programme to the Division on its departure from Greece. Here is the report, as monitored by the All India Radio monitoring station in Simla.

B. B. C. Announcer: While the world undergoes the uncomfortable process of settling down to peace, it is to be hoped that the comradeship spontaneously generated among peoples when they were under arms in a common cause will not be lost. One of the best examples of that comradeship was seen in the Indian Army, in which British and Indian troops fought side by side. The deeds of one Division, the 4th Indian, known from its divisional sign as "The Red Eagle," needs no emphasis; they are already part of history.

Before the Division left Athens, members of its various units were brought together to make a valuable record of what General Rees described as that "great fellowship forged in the fire of war". You'll hear these men talking to you now, introduced by the Division P.R.O., Captain James Manning.

Captain Manning: The last Indian and Gurkha troops are returning home from Europe. They were the first of India's great expeditionary force to be sent overseas in the late war. Since 1939 this Division has fought its way for thousands of miles across the Western Desert, Eritrea, Syria, Tunisia, Italy and Greece; taken 100,000 prisoners; and suffered 25,000 casualties. Before embarking at Salonica some of the men broadcast their farewells. First, I'd like you to meet someone who has been with the Division from the beginning.

SPEAKER: Yes, I think I hold the record. My name is Mohammad Abdul Rashid Malik. I am a V.C.O., and live in Pathankot. I was with the Division when they went overseas.

MANNING: You've plenty of souvenirs then?

Subedar Malik: Only two: the Afrika Corps hatband of General von Arnim, who was captured by our Division, and his jack-knife, which, by the way, has a very fine bottle opener. But I also take back with me proud and happy memories of the British soldiers who have fought with the Red Eagles.

British Soldier: That's right, Subedar Sahib—and don't forget the infantry. Blimey! the stories I could tell in old Blighty! There were the Essex, the Royal Fusiliers, the Buffs, the "Swedes"—that's what we call the Royal Suffolks, y'know.

Scotsman: Aye—and dinna ye forget the laddies from Bonnie Scotland—the Cameroons, the Highland Light Infantry, and the Regiment o' my ain heart and choice—the Lovat Scouts! Lovats are newcomers to this Division, but they've come a long way, mind ye. I'm a crofter on the Isle of Skye, north of the Hebrides, and after being with the lads from India I'll soon be training my sheep dog again.

GURKHA: Shsh! I'm a Highlander, too, but from the Himalayas, which are much higher than your Scotch mountains—and my name is Naik Sham Sher Jang Singh, from Nepal.

British Soldier: Nepal! Now that's a proper land of mystery You can't nip on a steamer or the Underground to Nepal.

GURKHA: No, there aren't any railways in Nepal, and only the Nepalese are allowed into our country. It will take a fortnight for some of us to reach our homes from Regimental Centres, travelling on foot or by pony across the foothills of the world's highest mountains.

Welshman: There're some Welshmen in the Division, too. Wherever there's a war you'll find a Welshman, to be sure. Some of us are gunners, but you wouldn't forget the Welsh Regiments, would you?

GURKHA: When I get to my village in India there will be feasting and dancing, and my father will be very happy. He served in the Indian Cavalry in the last War.

BRITISHER: Chip of the old block, eh, Jang Singh? Tell me, how do you Indians pick up the lingo so quickly?

SUBEDAR MALIK: Oh! I can answer that question in nine different-languages—English, Italian (speaks in Italian), Greek, too (speaks in Greek), also Persian, Arabic, Hindustani, Punjabi, Gurkhali, Dogri. Indian soldiers soon pick up languages wherever they go, even in Greece, where the language is so difficult. The reason is that we have such good ears for music.

SCOTSMAN: Talking of music, have ye no' heard the sweet sound of the pipes?

GURKHA: Gurkhas like bagpipes, too, and we have dances in Nepal just like your Highland dances.

British Soldier: Why do they call you Gurkhas if you come from Nepal?

GURKHA: It comes from two Sanskrit words: Gow meaning "cow", and raksha meaning "Preserver," for we are Hindus, and to us the cow is sacred.

British Soldier: And another thing. You've always got goats outside your cookhouses.

GURKHA: That's because goats are food and drink to us.

BRITISH SQLDIER: Better than the old kind of bitter, eh?

GURKHA: No, rum is our favourite drink. I must tell you that when some Gurkhas went to London recently they found your whiskey very weak.

Scotsman: Ay! it's to Scotland ye should have gone.

MANNING: Well, soon I hope your families will be drinking your health in your own homes, but I'm sure you'll always remember the many battles you've fought together.

Subedar Malik: Yes, at Sidi Barani, in Abyssinia, Syria, Tobruk, Benghazi, El Alamein, Tunisia, over to Italy for Casino and the Gothic line.

Manning: And a very fine record, too, as all the world knows—and no better than your Divisional Commander, Major-General T. W. Rees.

WELSHMAN: Don't forget the General comes from Wales, mind.

General Rees: We're homeward bound at last. To most of the Division that means India, but practically one-third of an Indian Division is composed of British troops. So with sadness we say farewell to our British comrades. We cannot believe, however, that this great fellowship forged in the fire of war has come to an end. We believe that this brotherhood, this mutual understanding, and this wholehearted co-operation of all castes and creeds, whether they be Hindus, Muslims, Christian or Sikh, are an augury for the future of the British Empire, and, indeed, for the whole world. They show what can be achieved by understanding, courage and determination in tackling a common task.

I had the honour of being with the Division when it fought its first battles. By a happy chance I take them home now they have fought what we all hope has been their last fight. So, on behalf of all ranks and races of the Indian Army, Indian and Gurkha, I say farewell and God speed to all our British comrades, past and present

India's National War Academy

India's National War Academy, it is officially announced, will be located at Kharakvsala Lake, near Poona. More than 2,000 acres of land will be reserved in the vicinity for this purpose, but the Academy will finally extend over a much larger area.

Steps are now being taken to implement the recommendations of the delegation of the National War Memorial Committee, which returned to India after touring Service institutions in the U.S.A., Canada and the U.K., last year. Special sub-committees are now busy preparing the syllabus and plans for the staff, establishments, buildings and general lay-out of the National War Academy.

Dr. Amarnath Jha, Vice-Chancellar of the Allahabad University, is chairman of the Syllabus and the Establishments Sub-Committee, and Maj.-Gen. D. Bateman, Director of Military Training, who is one of the sub-committee members, is also Chairman of the Accommodation and Planning Sub-Committee. Other prominent educationists and experts may be co-opted to these committees.

Candidates for the Academy, which will be the main channel of entry into the commissioned ranks for the three services, should be between 16 and 19 years of age. Promotion from the ranks and direct commission to University candidates will supplement the flow from the Academy.

The course, of four years' duration, will start with a short period of recruit training, followed by instruction in academic and common service subjects. Towards the end of the first year candidates will be attached for a period to various units, to test their inclinations and give them an experience of conditions in all three Services. Selection will then be made for specialised training for the Navy, Army and Air Force.

The syllabus for academic subjects will cover a wide range and include mathematics, history, geography, Hindustani, modern languages, English, general science, economics, law, book-keeping, meteorology, statistics and practical workshop training.

The Government has provided Rs. 5,00,000 in the 1946-47 Budget for the National War Academy. It is expected that funds for the Academy will come from public subscriptions supplemented by Government grants. The Sudan Government's gift of £100,000 will also be used for this purpose.

FURTHER THOUGHTS ON FRONTIER MYTHS*

By "THE ADMIRAL."

I WANT to oppose the views expressed by Lt.-Colonel W. F. G. Spaight in his article "The Frontier Myth" in your July 1945 issue and the approval of those ideas by "Auspex" in the following issue.

The article was written to prove, in the words of its author's paragraph "Conclusion," that "The Frontier is not a good training ground for modern war. Troops and Officers steeped in Frontier training are liable to be excessively cautious, timid in patrolling, ignorant of modern tactics, unfit physically and horrified of high casualties."

I propose to show that the second sentence is based on wrong information or mis-judgment, and that for this and other reasons the idea expressed in the first sentence is a mistaken one.

From certain passages in the article it would appear that its author is under the impression that the entire physical effort of the troops in Waziristan is limited to the opening of the road from Razmak to the Narai twice a week, and that physical fitness suffers accordingly. This impression is completely erroneous. Even in areas where units are mostly engaged in static duties, pickets have to be frequently watered, rationed and relieved. The first two duties always involve escorts and sometimes carrying parties. As nearly all pickets are located on hill-tops this involves quite a considerable amount of exercise. In addition, if the Battalion responsible for the sector is up to the average in initiative and industry it is ghashting constantly in its area.

Any properly-run Battalion on the L. of C. gets exercise equivalent to about four 25-mile route marches per week. R.I.A.S.C. units on the L. of C. constantly go up and down to pickets and get quite enough work under load to keep them fit. As to the I.A.O.C., does physical fitness much affect their ability to their job?

Are excessive caution and timidity and patrolling really developed on the Frontier? On first thoughts it might seem so, but a little consideration will go far to disprove this. We do not patrol enough at night, principally because we are not allowed to; but in the day we do almost nothing else. Every route picket is a patrol, which is using the ground best suited to its task. If one remembers (or finds out) what orders must be given to a patrol and then remembers (or finds out) what a picket should be drilled to do, one finds a great similarity.

If a Column Commander says: "We will picket the route from Bibizar to Sararogha" one says, "What a Blimp! Can he never leave the old rut?" If the commander says, "We will patrol here and here" one applauds his wisdom and vision unless, of course, one has sufficient perspicacity to realise that patrols, if they are to be of any use at all, will have to go where the pickets go and stay there for the same period.

^{*} Owing to heavy pressure on space it was not possible to include this article in our last tssue. "Picket"—an outpost or guard—has been spelt in that form throughout this article, instead of the more familiar but nevertheless incorrect "piquet".

A patrol stooging around in the nullahs can see nothing and do little. Patrols do all their most valuable work during their halts (except in an actual assault). The best positions for patrols to halt on the Frontier are positions to which pickets are normally sent. A picket ought to go to its position like a patrol. Its departure therefrom is by a normal patrol method—moving without being seen and crossing ground commanded by the enemy as fast as possible, i.e. slipping stealthily back behind the hill-top and then running like hell down the slope.

Do we develop excessive caution? Whether we liked it or not, all the Regular troops who formed the foundation of the present large Indian Army were steeped in Frontier lore, and their background and training indisputably coloured the whole army. It is therefore of interest to note that, almost without exception, the greatest feats of the Indian Army in the late war were in the attack.

Fourth and Fifth Indian Divisions when they first went into action were, apart from two or three E. C. Os per Battalion, almost entirely Regular. Practically all the Indian Units excepting in the 11th Brigade, had only recently turned their attention from the Frontier to what was then called extensive warfare. Not many months before many units had actually been on operations in Waziristan. I think, however, it will be generally conceded that at Keren and other places they succeeded in overcoming that excessive caution, timidity and horror of high casualties of which the author of "Frontier Myth" speaks. In fact, their conduct was such as to prove him, on this matter, utterly and completely in error.

The Eighth Indian Division when it arrived in action contained a far smaller proportion of Regulars, but nonetheless it is of interest to note that it contained an unusually high proportion of units with strong Frontier connections, while their Commander was almost as much a part of that locality as Razmak-Narai is. The record of this Division will already be familiar to readers of this Journal.

Waziristan had in peacetime unbounded advantages over mere training for a war which had not started, and was for long not even in sight. Of those desperate battles on which Blueland hurled back the forces of Redland one could normally say that the Director brought 100% enthusiasm to his task; the officers, from 100% to 0%; the I. O. Rs. 100% (but they were sometimes rather puzzled: "The enemy is in the East, but we will attack to the North, because there are crops in the way"); the B. O. Rs. didn't know what was happening and didn't...well care. As they were in process of spending six utterly leaveless years away from home this attitude, though reprehensible, was perhaps not as surprising as one might at first think.

On the Frontier, however, nearly everyone knew what was going on and everyone cared. The reason for this was that there was a chance of the immediate application of what was being practised. There was interest. There was the opportunity of shooting a line to those who were elsewhere. There was, especially in the columns, a feeling of comradeship. There was extremely high technical efficiency in unit administrative matters, which in the more efficient columns, saved hours of time.

In, say, Razcol in 1933, every officer was an efficiency expert, as they would call it in business circles. There was never a movement too few, and never a movement too much. Two British Service Officers, now C. Os., who were then in Razcol told the writer a dozen years later that they had, in a year in Razmak,

acquired more knowledge useful to them in Italy than in all the rest of their service. Indian Infantry spent two years on the Frontier out of every six. Almost every such unit was better when it left the Frontier than when it arrived. In cases where this was not so, the C.O. should immediately have been awarded a Bowler Hat (and bar).

Waziristan, in peace time, built morale. The British troop, seeing a man with a knife in his belt and a rifle on his back, was thrilled for the first time in India outside the cinema. The Indian troop, whose mainspring is his very strong professional pride, was on his mettle to show himself better than neighbouring Units. The greatest effect, however, was on the officers. They, consciously or unconsciously, contrasted this life with the form-ridden existence in a Cantonment.

In Waziristan any movement of troops might culminate in a skirmish. Down-country, it would almost certainly culminate in objections by the C.M.A. and a complaint from the Ordnance that—"Oh! horror, horror! Tongue nor heart cannot conceive nor name thee!"—training had been carried out with some equipment issued for use when a war broke out.

Our Cantonments contained almost no students of war, though some of them numbered amongst their inhabitants a number of enthusiastic students of promotion. Intellectual military life, as it would be understood in Germany, was almost non-existent. Students of their unit, *i.e.* good regimental officers, fortunately abounded, but tended to stagnate.

To go to the Frontier from down country (or Home) was rather like going from beside a death bed to watch a P. T. Course passing out. There were no great intellectual problems on the Frontier; but it was necessary for Commanders to apply intelligently what fire they could command, to move by the best routes possible to them and to co-operate with other arms. The fact that the Brigade plan was frequently restricted by unsuitable forms of transport, or various political instructions, was of no great moment. In any operation, if we come to a 100-foot ravine with only a footbridge across it, the mobility of our tanks will be reduced, but we may still be able to employ their fire. We are always restricted by something in war—ground, climate, shipping, parsimony in pre-war years—so we may as well get used to the idea and use our brains as best we can to overcome our difficulties.

The Pathan was never the world's best umpire, but he quite unquestionably was the best umpire with whom our forces or anyone else's came into contact in peace time. No where else in the world, as far as I know, were tactical mistakes on training punished by a burst of fire.

Probably the greatest lesson learnt on the Frontier was co-operation. Nowhere else in peace time did such teams as Razcol in 1933, or Tocol in 1937, work together. Problems were simple, but they taught Infantry Gunners, Sappers and the ancillary Services what language each other talked, and to know whether they were on their elbows or some other portion of their anatomy.

Where else in peace time would the junior officer find similar opportunities of command? The writer, when a subaltern of six years' service, found himself in command of a fort and responsible for six miles of defile. The forces at his disposal were one post 4.5 How., one M. M. G. Pl and two 4 Pl Rifle Coys. About three Rifle Platoons and one M. M. G. Section were disposed in permanent

pickets. The remainder were available for ghashts, which were vigorously carried out. These operations had to be co-ordinated with an Armoured Car Section working on the road. Communications with the Post Gun presented interesting though small signal problems. We had not, of course, a single Wireless Set. Although the actual conditions are extremely unlikely ever to be reproduced elsewhere, the writer cannot feel that this experience was valueless.

Let us pass now to Lt.-Col. Spaight's bald statement that the "The Frontier is not a good training ground for modern war." This in bound up with his notion that the Frontier soldier is ignorant of modern tactics.

Professor Joad, of the Brains Trust (and other organisations), would say; "It depends on what you mean by modern war and modern tactics." Modern war—or anyway the one most recently out of date—meant, as far as the Indian Army was concerned, fighting in the Western Desert, Somaliland, Eritrea, Abyssinia, Syria, Tripoli, Tunisia, Italy, Burma, Malaya and Hong Kong. In addition, there was fighting in Norway, Holland, Belgium, France, Poland, Russia, and Germany (as many of us are no doubt aware). There were landings on tropical, Mediterranean, Channel, and Norwegian beaches. There were airborne landings in all theatres. That's modern war, that was.

In all these operations, modern tactics were used (or so one hopes). It will be seen that there can never be any question of training successfully for modern war, but only for a specific type of operation. The conditions in all theatres varied to an amazing degree, but they had a common denominator. This was "combination of skill in movement with skill in application of fire."

That principle isn't so frightfully modern, as a matter of fact. Some foreigner named Napoleon Bonaparte, in a battle with some other foreigners at a place called Austerlitz, combined the two rather well over a hundred years ago. Other people had the same notion before him. The Romans supported by flights of arrows the advance of a testudo to the walls of a fort.

Before the war we taught a few stereotyped Section formations to our troops. These formations were to be varied according to the ground. We may be described as having varied our formations from Continent to Continent in this war, suiting them to deserts, Bocage country or jungles. Fire, too, varied from theatre to theatre. In Italy, where the defenders always held features providing wonderful observation, or on the Normandy coasts, where a fortress had to be reduced, fire (which of course includes the use of bombers) was the predominant factor. In Burma, with restricted vision, and on L of C incapable of supplying large quantities of ammunition, skilful movement was more important.

Being met together on the battlefield we require, in addition to good tactics, high morale and all the material we can get. We in the army have no control over the supply of the material. The amount which reaches us will vary directly as the fright in which the taxpayer is.

We must therefore concentrate on what we can ourselves produce—

(a) Skilful application of fire.

(b) Skilful movement.

Good tactics.

(c) The combination of (a) and (b)

(d) High morale.

Then we must train for a specific operation. Having completed this, we are trained for a certain phase of modern war.

At no time in the war was any unit of any country's army so trained that it could have immediately operated with efficiency in every theatre of war. We cannot, therefore, be properly trained until we know where we are to fight; but we can make a start; and we can make a good start on the Frontier.

We have seen that the Frontier gives opportunities to practice the application of fire, skilful movement and the combination of the two. Far more important than these, however, is the moral effect on units of a peace time Frontier tour. Indian Infantry, Mountain Gunners, Sappers and Miners and certain ancillary units were really live shows in the peace years. Of how many more units in the armies of the Commonwealth and Empire could this be said?

Without its continual sharpening on the whetstone of the Frontier, the scythe of the Indian Army could never in this war have cut the swathe it did.

THINGS PEOPLE SAY AND WRITE

"I am a bricklayer by trade."—Lord Quibell, speaking in the House of

Lords. "The figure of Lord Nelson in Trafalgar Square is 17 ft. high."—Mr. S.

Larkins.

"It is quality, not equality, that a nation needs for progress."—Lord

Woolton.
"An ounce of warm humanity is worth a ton of cold legality."—Miss

Alice Bacon, M. P.

"The London County Council intends to spend £17,500,000 on education in 1946."—L. C. C.

"Oilfields in Britain have yielded 400,000 tons of good quality oil to date."

-Dr. W. A. Macfadyn.

"Plain living and high thinking is the way to make the most of Life."-The Very Rev. W. R. Inge.

"China plans to build 40,000 miles of railways during the next ten years."—

U. S. Civil Aeronautics Board.

"People in the United States waste more good than most people in Great Britain eat."—Mr. E. Morrow.

"The smaller your force, the larger percentage you should hold in reserve."

-Field Marshal Sir Harold Alexander.

"Hitler was a mixture of Joan of Arc and Charlie Chaplin."—Herr Otto

Abetz, former German Ambassador in France.

'More than 120 chaplains in the British Army were killed during the war or died of wounds."—Archbishop of Canterbury.

"Uranium deposits, said to be the richest in the world, have been found

in Stanthorpe, S. E. Queensland."—Daily Telegraph.

"It costs about £2,500, including £750 for fuel, to fly a four-engined air liner across the Atlantic."—Air Commodore L. G. S. Payne.

"Russia is producing gold at an annual rate of from £42,190,000 to

£70,000,000 from nineteen major fields."—New York Times.

"When it is completed the Heathrow airport near London will have no superior in the world."—Lord Winster, Minister of Civil Aviation.

"The Chinese have a proverb that a lie travels round the world while truth is putting on its boots."—Mr. A. MacClay, in United Empire.

"At one period during the war British railways had nearly 20,000 of their

staff making armaments in 35 railway workshops."—London Calling.

The Mauritania recently broke the 4,000-mile run record from Fremantle

to Durban by covering the distance in eight days."—Dr. George Gretton.

"The British official history of World War II was begun in 1942. It is hoped to publish a popular edition in 1947."—General Sir James Edmunds.

"A B. O. A. C. Lancastrian has just flown from England to India and

back in three and a half days, averaging 260 m.p.h."—Evening Standard.

"R.A.F. Transport Command will not even accept a pilot for training unless he has 1,000 flying hours to his credit."—Wing Commander Charles Gardner.

"The total sum paid in annuities to the descendants of the brother of Lord Nelson since the annuity was instituted in 1806 is £700,000."—Mr. Dalton,

"During the war 897 passengers, railway servants and other persons were killed by enemy action on British railways; 4,379 were seriously injured." -Chief Inspecting Officer of Railways.

"Total losses of the German armed forces in killed, permanently wounded and permanent medical casualties between September 1, 1938 and May 10, 1945, are estimated at 7,400,000."—Mr. C. Attlee, Prime Minister in Britain.

"Pupils and students of all ages attending schools in Russia increased from 8,137,000 in 1914 to 15,008,000 in 1920 and to the enormous figure of 47,700,000 in 1939."—Mr. G. S. Counts, in "Asia and the America's."

"What astounds me about the history of the Royal Navy is how cheaply we have policed the world for 300 years with less than 100,000 men. It is time we sang our own song for a little bit."—Mr. Ernest Bevin, M.P., Foreign Secretary.

"In the 1914—1918 war Egyptians working in the dock areas of Port Said and Alexandria wore an armband with the initial letters W. O. G. S.—Working on Government Service. Hence the term 'Wogs'."—Mr. P. A. Lanyon-Oraill

"It is the British way of life that men can differ and be friends; that the results of a Parliamentary election can be accepted with not less philosophical sportsmanship than the result of a cup tie or a Test match is one of our national virtues."—Mr. Hugh Dalton, M.P.

"The new House of Commons will have 456 loudspeakers installed. The chief problem (for those planning the building) was not the heating, but the cooling of the Chamber and the elimination of hot air."—Mr. A. Gilbert Scott, addressing the Town and Country Planning Association in London.

"Former Luftwaffe personnel, now working alongside German war prisoners on disarmament work, wear a working dress based on the British battle dress. With a headgear resembling a deer-stalker, this apparel is totally unlike that of any military organisation in the world."—B. P. I. cable from London.

"The U. S. A. plans to maintain a Navy in the post-war world bigger than the rest of the world's fleet combined; an air force more powerful than the rest of the world's air fleets combined; and a strong, modern streamlined Army which can be expanded into a huge force at a word from the War Department."— Don Iddon, Daily Mail.

"By the new B. A. O. C. services passengers can leave England at 8 a.m. on Monday, arriving in New Zealand just after 9-30 a.m. on Thursday; or reaching Tokyo after 7 p.m. on Wednesday; or in New York in time for breakfast on Tuesday morning. Daily services will fly to New York and Montreal; later they will be increased to two services per day."—Viscount Knollys.

"A German general visited Field Marshal Montgomery's H.Q. under a flag of truce. 'You have ruined our cities; our communication lines are destroyed; our ammunition dumps blown up; our people are starving; our railways bombed out; and we have little water.' The Field Marshal's reply was a master-piece of simplicity. 'Splendid' he said; 'just as it should be.'"—Major Edward' Culver, an American Officer on Field Marshal Montgomery's Staff.

"From five to 15 years from now guided missiles and atomic explosives may have been developed into reliable and practical weapons. During the intervening years newly-designed fleets and air forces suited to guided missiles and atomic explosives will also have been developed. We will be in a period of transition from war as we know it now to war as it may be in the future. Fifteen to 25 years from now it is possible that accurate trans-oceanic missiles will be developed. When that happens the whole character of warfare may be radically changed."—Mr. Artemus Gates, U. S. Under-Secretary for the Navy.

WANTED: AN INDIAN NURSING CRUSADE

BY MATRON R. M. HINCHEY, Q.A.I.M.N.S.

RAISING the standard of living in India is dependent upon 778,000 nurses! Much has been and is still being written on the subject of Post-war India, but gradually the realisation has come that, to improve existing conditions, the woman is of more importance than the man. Improvement will begin from within the home, and hangs more upon the help and knowledge of the wife, mother and daughter than upon anything else.

The subject of public health and nursing has been stressed over and over again in public speeches and articles. Dr. Lazarus, at the All-India Womens' Conference, said: "The progress of India is dependent upon the health of her people. One of the most striking defects of the grossly inadequate health services is the lack of nursing personnel". Mrs. Mehta also referred to the same subject in her Presidential address.

The report of the Committee presided over by Sir Joseph Bhore admits that "Our whole plan may be gravely jeopardised if it is unable to command the nurses it requires." It may perhaps be a matter for regret that the Committee did not have the advantage of having a nurse among its members.

It is proposed that in each village there will be a visiting doctor and member of the Women's Welfare Service, and a resident nurse. The proposal is good. There is a certain appeal for an Indian woman to become a member of the Welfare service, and it is possible that volunteers will be forthcoming. As regards health, at the present time there is one doctor per 6,300 population.

Doctors diagnose and prescribe treatment but a skilled nurse carries it out. And it is this skilled resident nurse, I fear, who is to be the biggest problem of all. Her presence in the village is of unlimited value—but has the number of nurses required been sufficiently realised? For every doctor three nurses are required (that is the ratio in England, Canada and most other countries). In India there are ten doctors to every nurse.

What is the nursing position in India in the comparatively near future? Many fine civil hospitals throughout this sub-continent are desperately understaffed—and without nurses no hospital can function; mission schools concerned with the training of nurses are similarly placed. Nurses recruited for the I.M.N.S. during the war were below half of those required to nurse Indian wounded, and British sisters and V. A. Ds. had to help fill the gap, and still do. Many women now in the Service will become regular nursing officers, which means that fewer will be available to become resident nurses. British sisters and nurses now serving in India will be returning to Britain. Thus there is every prospect that the number of nurses in India will decrease, instead of increase. To put it bluntly, in this year of Grace 1946 there are 7,000 nurses in the whole of India—and the number required is 778,000!

Indispensable is the nurse's part in this plan for improving the standard of living. She is the one who is going to be in close and constant contact with the women in their homes and basties. She it is who will teach them child welfare

practically, so that results can be seen and understood. She it is who will know the state of the water supply, and will persuade the doctor to help her on his visits. She will know what the washing facilities are, and teach, preach and practice cleanliness of home, family and surroundings.

Food values and diet, fruit and vegetables are subjects she can teach. Cooking, mending clothes, the correct clothes to wear for themselves and for their children are subjects which will fall within her province. She will know where there are bad drains or no drains at all; she it is who will report it and keep on reporting until they are improved; and she it is who will have to see that the promised latrines are there in use. By visiting her patients and trying to make their surroundings more attractive she will persuade the women by example to make their homes into more comfortable places.

Responsibility for the uplift is going to fall heavily on the nurse. There are schemes for "visiting" domestic training schools, for teachers and for welfare, but all of these will visit villages and villagers. The resident nurse, however, will live among them.

Health services depend upon the resident nurse and her knowledge of preventive medicine. Half-sick, half-well people are not disposed to be centhusiastic about new ideas that call for more work, when the exponents have left the village. To ensure success, the nurse will have to live in the village to encourage the villagers to act on her advice. She will be there, too, to teach them the value of vaccination and inoculation, to persuade and bring them to the doctor when he visits the village. Prevention of tuberculosis, dysentery, cholera, typhoid and malaria are all in her charge; she will see that mosquito and fly nets are used for babies; she will make sure that no untrained midwife or dai practices.

These everyday duties of a trained Public Health nurse are the very essence and meaning of raising the standard of living. If a lasting improvement is to come it must come via the resident—the nurse.

The Nursing world has not been asleep. It has foreseen all this, and much spade work has been done. Health schools have been established in which girls are trained for this work in rural areas. The Military Nursing Services of India are training four sisters every year to be tutor sisters, so that later they will become teaching sisters in civil training schools. Auxiliary Nursing Cadets are being trained by the Army at Roorkee and Jullundur in order that they might sometime become fully trained nurses in civil life. Midwifery schools are busy trying to increase the number of midwives.

An All-India College of Nursing to be built which will train already trained nurses as tutor sisters, administrators, and dietitians. Its aim will be to provide a better training for student nurses, and also to train Public Health nurses. The Training Nurses' Association of India has held conferences, and discussed papers and plans. Miss E. E. Hutchins was sent to England, Canada and America—all with the same object in view, to gain knowledge and learn from other countries. A recruiting campaign has been conducted and nursing procedures shown to school children. The Government of India granted two scholarships, and the winners were sent to England. Another four went on a Florence Nightingale scholarship, and yet another four were sent this year to Toronto by the Rockefeller Foundation for post-graduate training.

Always the accent has been on their adequate training, for trained and registered the resident nurse must be. Danger, disaster and abuses lie ahead if unqualified or improperly trained women are permitted as resident nurses.

Certainly the nursing world has made an effort to lay a foundation, for everything that has been achieved, and is still being done, has been due to the voluntary efforts of a handful of farsighted women, among them being Miss Wilkinson, President of the Trained Nurses Association, who obtained State registration for Indian nurses.

Thus everything possible has been done as thoroughly as it could be done for the future, if only—if only Indian women would become nurses. It is here that doubts arise. Where are these thousands, these 778,000 women coming from?

There is a pronounced social stigma attached to nursing as a career throughout the length and breadth of India. It is poorly paid. During their student days girls have to be helped financially. When the long period of training is over, things are at first little better, though later senior jobs carry higher salaries than those of junior doctors. No Indian family seems to have any objection to their daughter becoming a doctor—but allow her to be a nurse? No! Hence we arrive at our figure of ten doctors to every nurse.

The vast majority of girls in Nurses' Training schools are Christians. In fact, it is only in recent years that in the classes of twenty student nurses one, or perhaps two, were not Christians. Of the total of 7,000 such nurses in training and at work at least 88 per cent. are Christians, the remaining 12 per cent. being non-Christian—Hindus, Muslims and Parsees combined. The non-Christian girls who are nurses are to a large extent daughters and sisters of doctors, or of professional people who have had close contact with Western countries. But the bulk of India, the people from whom that staggering number of 778,000 must be drawn, do not yet understand the true value of the nursing profession. Nor do those who teach them help very much.

I spoke to a teacher, an Englishwoman, in an Indian school. Her reaction was immediate. "Oh, no. You see, socially——." Her voice trailed away. Then she said: "Our object in educating women is to raise them." But true education is not the mere assimilation of book-knowledge. It is the formation of character, and what profession encourages and stimulates the building of character more than that of nursing? I could not convince her that that very "raising" would come through nursing. "There have been doctors and teachers since time immemorial, but Florence Nightingale had to come before the Industrial Revolution. Moreover, nursing puts so many ideas into actual practice." She did not answer. But she looked thoughtful.

Following the Nurses Recruitment Campaign in Delhi, I talked with enthusiasm to a prominent Indian doctor. He listened most politely with a tolerant smile, and at the end he waved his hand and said: "Fifty years—another fifty years—perhaps."

Many people in the medical world declare that this reluctance on the part of Indian women to play their part in the nursing profession is just unreal. The Bhore report does not even admit its existence, nor does it mention it.

It mentions the conditions under which potential nurses know they will have to live and work as deplorable. It is a fact that those conditions are appalling. That word is no exaggeration. To substantiate it, let me quote Sir Jogendra Singh, Minister of Health:

"In our civil hospitals the conditions of service for nurses repel rather than attract, and there is gross overcrowding in unhealthy accommodation. Supervising and teaching staffs are insufficient and inadequately trained."

And also Lieut.-General Hance, D.G., I.M.S.: "As long as nurses are regarded, paid and housed as menials, it is not reasonable to expect large numbers of Indian ladies to come forward to dedicate themselves to this work."

If the authorities responsible for the maintenance of hospitals would think in terms of the Nurses Home, there would be more nurses, and equally important, patients would receive the treatment they require. Nurses must be given their own room, and a Home Sister must be appointed to supervise their food, their hours, their conditions of living. They must not be herded into dormitories. If something on these lines was done, nursing would not be quite the anathema it is to Indian parents.

Proof of this was revealed during the war, for in places where living conditions were good, where there was an efficient tutor sister, and girls felt they were learning something of value, there was a waiting list. Yet even this waiting list was comprised mostly of Christian girls, with that tiny but so important 12 per cent. non-Christians from among parents who already knew and understood.

What are the qualifications demanded of an Indian girl wanting to become a nurse? She has to be intelligent, and to have passed her Senior Cambridge, though at the moment lesser standards are accepted. She has to work hard physically and mentally for three years, and probably another six months to fit her for Public Health work. And at the end of all that, post-war planners ask her to go alone to a village miles from relatives, friends and interests, at the age of 23 or 24, and stay there! And on precious little pay. Is it surprising that the response has been meagre? To attract more and more girls the prospects must be made more attractive—and not merely financially. All of us, British and Indian, know that for Public Health work there should be a resident nurse in every Indian village, and it is only when that fact is thoroughly appreciated that we realise the enormity of the problem.

Let us imagine for a moment that there was not a cloud in this nursing sky. Let us imagine that every hospital had a Nurses Home comparable with those in the U. K. or anywhere else in the world; that each hospital brought one tutor sister from outside India for five years, that is, until the All-India College of Nursing could supply their own; that the resident nurse had a comfortable house and clinic ready to receive her; and that sometimes a bus called to take her for a mental breath of fresh air. Given all those things, at the end of ten years, all that combined would not produce 30,000 nurses. The Bhore Report aims at 50,000 in ten years. It is impossible under present conditions. The A.N.S., the members of which lived and worked under the same conditions as British sisters, and V.A.D. nurses, produced precisely 199 girls who were non-Christian—and that at a time of National Emergency. At the end of those ten years there would still be 748,000 nurses urgently needed.

I can see only one remedy. A nation-wide crusade, backed up by all the modern means of propaganda, and directed with vision and drive. Not a few isolated posters of an unattractive woman in a nurse's uniform, but publicity directed as much to the parents and families as to the girls themselves. Such publicity would stress that after training girls would be better wives and mothers; better companions for their husbands; better parents. Moreover, it would stress the benefit of having one girl in the family with nursing knowledge.

It is in those characteristics that we find the true value of a nursing career, for it is a career which teaches others to preserve one of the finest things in life—health. And a Public Health nurse is only too happy to pass on her knowledge to her family and friends. She has something tangible; something of use to her country and to her people.

This crusade for nurses cannot be waged wholly by volunteers. It must be planned and carried out by publicity experts. Enthusiastic volunteers can follow it up into the remoter parts. It will need money; a lot of money. And the drive must be sustained, not spasmodic, to achieve success. Press, radio, cinema, discussion groups, posters, schools, colleges, voluntary social organisations of all kinds—all will have to be used if this scheme of "selling nursing to Indian girls" is to be 100 per cent. successful.

What better time than the present could there be to initiate this crusade? Many women's organisations are to be disbanded in the near future. Why not capitalise the spark of public spirit that has been kindled during the war? We have a glorious opportunity, and we should seize it with courage and avidity.

From all sides there is the cry: "Improve the standard of living." Here is one certain means of doing so, for without proper nursing there cannot be a healthy nation, and a healthy nation is vital to both peace and prosperity.

, INDIA'S POLICY TOWARDS STATES OF THE INDIAN OCEAN AREA.

By K. M. PANIKKAR

Prime Minister of Bikaner State.

THE POLICY of a State or a country is determined by its geographical position. The reason is simple. The safety and security of a State are its first consideration. They are clearly dependent on geographical factors, questions of frontier, control of strategic areas vital for defence or for communication, prevention of other Powers from obtaining positions of advantage which will reduce the offensive capacity or restrict the mobility of armed forces, and, in the last resort, affect even the defence of the homeland. These, then, are the permanent factors on which the policy of a State towards its neighbours has to be based.

It follows that the form of Government in a State has but little to do with its external policy—at least in a long-term sense. Though this would appear to be axiomatic, I may give two illustrations—France and Russia. In both countries the most violent revolutions uprooted the bases of society, changed the forms of Government, while the world was led to believe that a new and international order of things would be established. But, in a few years time, facts of geography asserted themselves. The heir to the Revolution claimed the Rhine; the Bolsheviks, who denounced the spheres of influence in Persia, are now furiously pressing the same claims the Czars had put forward. In fact, General de Gaulle talks the language which Richelieu and Louis XIV or even Philip de Bel would have understood, and Stalin thinks fundamentally in terms of Catherine the Great and Czar Alexander.

True, the range and nature of weapons, developments in conveyance and transport and the conquering of space may extend the sphere of security and thereby bring about revolutions in policy, but the basic consideration remains that the object of all policy is territorial security, and this is governed predominantly by geographical factors.

Whatever, therefore, the form and basis of the Government of India, and whatever its political complexion, the interests which India has to safeguard will not change, and, therefore, her policy will remain fundamentally the same. A second assumption is that whatever the political status of India, a close and intimate association in policy between England and India, including the upholding of that policy by force, is inevitable. A permanent alliance for security between England and India is a primary necessity, and has to be accepted as such.

How can such an alliance be guaranteed? A moment's consideration will show that the whole policy of Britain in Middle and South East Asia, in the area of the Indian Ocean, has been determined by her position in India for the safeguarding of India's security. This was the object of Malcolm's mission to Persia, with which begins the chequered history of modern India's relations with Iran, of the many wars against Afghanistan, of Sir Francis Younghusband's mission to Lhasa, of the settlement with France regarding Siam, the treaty with Iraq and the recent developments on the Arabian coastline. The policy of the steel ring round India was primarily for the security of India itself. In the Indian Ocean area, Britain's policy is India's policy, and there is no ground for conflict or rivalry.

Without Britain's co-operation and support, no adequate defence machinery can be organised, as modern defence includes not merely the maintenance of large armies, but the development of air and naval forces, upkeep of distant bases, the maintenance of scientific research and technical skill at the highest level. Without the closest co-operation with Britain, such a development will be wholly beyond India's capacity for many decades to come.

It requires no strategic or other specialised knowledge to recognise that the Indian Ocean and naturally the areas washed by it are most vital to India's security. This has been so from time immemorial, though the Central Asian bias of Delhi and the unchallenged mastery of England over the seven seas obscured the point for a long time. The threat to India's security, which the fall of Singapore involved, brought home this point to many who had forgotten the lessons of history; and, but for the timely appearance of the American fleet off the Coral Seas, the policy indicated by the air attack on Trincomalee and Colombo might have had, at least for the time, disastrous consequences for India.

The importance of the Indian Ocean to India from other points of view may also be considered. All but a fraction of India's external trade passes over these oceanic routes. Our industrial development, commercial relations and even communications with other countries are dependent predominantly on the Indian Ocean. About the commercial importance of the Indian Ocean to India here is what Admiral Ballard said in his interesting book Lords of the Indian Ocean: "A momentary inspection of one of the trade charts periodically compiled by the Admiralty is more illuminating than days spent in the study of published statistics. These charts indicate the positions on certain dates of all British vessels above a small tonnage which were then at sea. They show the Indian Ocean as througed with a moving swarm of vessels on a maze of routes." The author also emphasises the dependence of the trade and industry of India on the security of the Indian Ocean.

Admiral Sir Herbert Richmond recently wrote to me; "Some statistics I compiled in 1929 showed how greatly the prosperity of India depended on the sea. Trade with the U. K. was £127.8 millions; with the other British Dominions and Colonies, £50 million; and with foreign countries, £236 millions, making altogether £413.8 millions, an immense figure, to which should be added the value of the coastal trade, including that with Burma."

India's position in regard to the Indian Ocean differs from that of other countries washed by its waters. While Persia is mainly continental in its economy, and Arabia has also a land frontier toward which it has always expanded, India, by its physical configuration which shuts her off from the Asiatic mainland by vast mountain ranges, is rendered dependent on the sea. While to other countries the Indian Ocean is no doubt important, to India it is vital.

So, from every point of view, the Indian Oceanis of fundamental importance to the very life of India. Naturally, Indian policy has, in a very great measure, to revolve round the question of security of the Indian Ocean. The political conditions in the areas which touch on this oceanic space and policy of the States which have interests in the Indian Ocean become of the very gravest concern to her. A definition of this policy cannot be attempted here at length; but a few main interests can be indicated.

Iran and the Persian Gulf.—The prevention of the dominance of the Persian Gulf by any Power capable of exerting naval pressure has to be a fundamental point of all Indian policy, as it has been of Britain. It is not that any Power which controls the Persian Gulf will immediately make war against India. The point of view which requires emphasis is that its possession by a first-class Power places India in a state of strategic disadvantage very much like the possession of Antwerp and the mouth of the Scheldt in the case of Great Britain. Napoleon described Antwerp as a pistol held at the breast of Britain. The position of the Persian Gulf is similar in regard to India. Any great Power which possesses it obtains an advantage over India and places her entire security in danger.

The attempt of Germany to get into the Gulf through the Berlin-Baghdad railway, thereby outflanking the sea routes from the Atlantic, was one of the main causes of Anglo-German rivalry leading to the war of 1914. Immediately the German plan was known, Britain took under her protection Kuweit, the ideal railhead for the scheme. Kor Abdulla and Mohrnaeral, both possible outlets, were also covered. German ambition to enter the Persian Gulf was thus checkmated.

But what of Russia, a Power with much greater potentialities, placed in a position from where she can bring her strength to bear on that vital area? The importance of the Gulf route was brought home to Russia by four years of supply which flowed in through Basra. Historically, Russia has never denied her interest in the Indian Ocean, and, until German policy drove her into an alliance with Britain in 1907, Russia openly advocated entry into the Indian Ocean as one of the major interests of Russian policy. As early as 1904 she had declared that "there should be no division of spheres in Persia which, together with the waters that bathe its shores, must remain the object of Russian material and moral protection."

We are now witnessing a revival of Russian interest in Iran. What should India's policy be in respect of this important development? Clearly, the maintenance of the independence, integrity and sovereign authority of Iran. I do not by any means underrate the difficulty of maintaining this position. The social structure and political evolution of Iran render all attempts to support that kingdom look like an effort to back up a decrepit and reactionary group of landholders and army chiefs. These are not very strong elements to back, especially when the Soviet regime provides a counter-attraction to the peasants, workers and the generally impoverished classes. Our policy has perforce to be the support of a middle-class democracy; but how far that can succeed when an immensely, powerful neighbour continuously backs the more revolutionary elements is one of the major problems of the future in the Middle East.

Iraq, of course, stands on a different footing. Britain has undertaken definite liabilities for its defence. From the security point of view, it is within the British area. But the structure of society and the concentration of political power in the hands of large landholders creates a problem which we cannot underestimate. India's interest in Iraq is to see that it remains free and outside the orbit of any other Power. The Arabian principalities, bordering on the Indian Ocean from Oman to Yemen, have imperceptibly entered the Empire defence scheme. The vast area of Hadramaut is now a Protectorate and outside the scope of Arab ambitions.

The African position also is not of any special importance now, since all potentially hostile Powers have been excluded from that continental area. But

it should be the unalterable policy of India to prevent either the littoral of the Red Sea or any portion of the Eastern coastline of Africa from falling into the hands of a major Power. There is, however, the great island of Madagascar with the magnificent port of Diego Suarez which requires some attention. At great cost, France converted Diego Suarez into an impregnable fortress, a kind of French Singapore, and M. Pellatan, the Minister of Marine, in asking for money declared in the Chamber of Deputies that, "it will command the Indian Ocean." In the hands of the French, it can, of course, command nothing, for, without the control of the Atlantic, it can never be a major naval base for France. But the danger of such a naval fortress in the Indian Ocean became obvious during the late war. Britain was forced to occupy it for fear of its falling into the hands of a major Power—Japan. The demilitarisation of Diego Suarez is, to my mind, of essential importance to India.

Now we come to what I consider the most important aspect of the Indian Ocean problem; the future of the East Indies. True, Japan has been eliminated from the Pacific as a naval Power, but has that in any sense affected the position in regard to this rich reservoir of raw materials? A new and potentially greater naval Power has entered the Pacific. Russia at Port Arthur means Russia in the South China seas. Let us not forget that the distance from Port Arthur to the Hongkong-Corrigedor-Singapore triangle is not greater than the distance from Pearl Harbour. The range of air power which, based on Saipan, was able to attack Japan shows that the security of the area which may be termed the Pacific Mediterranean is even more seriously threatened now than when Japan had occupied Hainan. In the result, the rich islands of Indonesia, held by the weak hands of Holland, become a danger point to the Indian Ocean, and hence to India. What is true of Indonesia is equally true of Thailand and Indo-China.

As to Malaya and Burma, apart from co-operation in matters of defence and security, India's only interest in these two areas is the attainment of political freedom by their people. Their geographical situation is too vital to the defence of this country for us to leave them to their own sources and to the might of Britain many thousand miles away. If the Bay of Bengal rules out the political union of India with Burma, the vital importance of that sea to India rules out the possibility of an independent defence policy for Burma and Malaya.

Of Ceylon, it is not necessary to say much. She has to be fed, defended and clothed from India. Her relations with India must, therefore, be of a particularly intimate kind. She cannot paddle her own canoe in any sphere except that of political organisation. The experiences of the late war brought home these essential factors with regard to Ceylon, Burma and Malaya to all, and even the blind have had their eyes opened by the Atomic Bomb.

What should India's policy be in regard to the whole Indian Ocean area? The suggestions which I venture to put forward here should be taken as purely tentative. To my mind, it seems obvious that it is only a regional organisation based mainly on Indo-British co-operation that can safeguard the peace and security of this area. The Indian Ocean area is one of the well-defined regions of the world. The geographical position of India dominates that area and gives to it its special characteristics. Situated centrally and jutting far out into the ocean and flanked on either side by the Arabian Sea and the Bay of Bengal, India is obviously the centre and base of all organisation of this region.

It is interesting to note that the geographical unity of this region was noted by all ancient geographers. It is the Indies of the medieval writers, extending from Abyssinia to Java. Dominated in its main centres of population by the mensoon and by its dependence on the security of the sea, the problems of the India Ocean area are similar. With similar problems and with their safety and security interdependent, it seems clear that the future of this area would depend on a regional organisation. If such an organisation of security within the framework of the San Francisco Charter can be established, on which the areas directly concerned like Iran, Iraq, Malaya, Burma and the Dutch East Indies are represented along with Britain, India and, perhaps, Australia, then a machinery may be created which may have the resources, strength and capacity to ensure the independence of the units and the security of all.

. How is this organisation to be brought about? Of course, the first essential pre-requisite of any regional organisation in this area is the reintegration of Indo-British relationship on a firm and unshakeable basis. Except on that basis, I cannot see that the problem can be effectively tackled at all, and I am firmly convinced that such an integration of relationship will come and that soon.

In any such organisation, a clear distinction has to be made between the defence of India and the security of India. So far as the defence of India, the organisation, structure, equipment and maintenance of India's national defence forces, that is a matter which comes only indirectly in the question of maintenance of peace and stable conditions in the security area. Ground was prepared for the separation of these two functions, the defence of India and the defence of the security area, by the separation of the India Command from the Supreme Command of South-East Asia.

The Indian security sphere covers the entire Indian Ocean area. The interest that India has in the security of the Persian Gulf, the integrity and stability of Persia and Afghanistan, the neutralisation of Sinkiang and Tibet and the security of Burma, Thailand and the Indo-Chinese coastline, apart of course from Malaya and Singapore, is obvious enough to all. In fact, with the changes in the technique of warfare, the area of security for India has become well defined. Situated strategically in the middle of this area, with her defence directly affected by conditions prevailing across her borders, India has to become the pivot of an organisation meant to preserve peace.

Historically this is the logical extension of the great Ring Fence Policy which the strategists of the East India Company from Hastings to Dalhousie had followed. Defining this system, Warren Hastings wrote as follows to Colonel Champion:—

"We engaged to assist the Wazir (of Oudh) in reducing the Rohilla country under his dominion, that the boundary of his possession may be completed, by the Ganges forming a barrier. This our alliance with him and the necessity for maintaining this alliance... was rendered advantageous to the Company's interest because the security of his possessions in that quarter is the security of ours."

The history of British expansion in India may be epitomised as a continuous moving forward of the Ring Fence, first to the boundary of Oudh, then to Delhi, then to the Sutlej and to the present frontier. Lord Curzon, who gave to the Ring Fence system its modern interpretation, was the theorist of the Buffer State as against the subsidiary alliance, but essentially the system is the same. "National Frontiers" was a subject to which Lord Curzon had given much attention, and his Romanes lecture on the subject gives clear evidence of his appreciation of the problem in terms of Indian security.

In fact, it is not too much to say that the Ring Fence now surrounding India is predominantly Curzon's handiwork. Since the time of Sir John Malcolm, he was the one person who had a realistic appreciation of the importance of Persia. It was his foresight that neutralised Tibet, though he was accused by Lord Morley of running an independent foreign policy as if he were the Moghul Emperor reigning at Delhi—a compliment more than an accusation, when one comes to think of it. It was also during his time that the status of Siam as a Buffer State was finally determined. The security area from the land side was determined with great foresight by Lord Curzon.

The weakest link in the Curzon system of Ring Fence was on the naval side. Curiously enough, he had no appreciation of naval problems, as a very remarkable passage in his lecture on the Frontier shows. In the result, he did not attach the same importance to Socotra, Mauritius and Singapore as he did to Teheran, Kabul and Lhasa. The conception of the Indian Ocean area was unfamiliar to him, and in this matter he was truly in the line of the Great Moghuls.

The Indian Ocean area with Afghanistan, Sinkiang and Tibet as the outer northern ring constitute the real security region of India. Geographically also this is one strategic unit, with India as its great air and land centre and as the base and arsenal of its naval power. From the central triangle of India the whole area can be controlled and defended. To create the political and military institutions necessary for this defence is the primary problem.

A Regional Council consisting of Britain, India and the other units of the area is the first step necessary for such a scheme of defence. This Council will be a higher political organisation, which will be charged with the planning of the defence of the entire region. The requirements of the area from every point of view, its economic development, the utilisation of its natural resources for coordinated defence purposes, the organisation of research into matters connected with security, the formulation of a general foreign and trade policy, in so far as it may affect the military potential of the area, the direct administration of certain strategic centres like Singapore and Aden—these will be matters directly within the range of the Regional Council.

The India Command must naturally provide the executive arm of the Council in peace time and in a large measure even in war time. No doubt, the Council will work out the extent of responsibility of each unit, but, apart from England, the disparity between India and the other units of the area is so great that their share in the responsibility for providing the machinery of defence will be comparatively small. That responsibility must in the main be shared between England and India.

England's share in the liability of defence must continue to be heavy, but it will necessarily be limited to those spheres in which she cannot act effectively even if she is threatened or attacked in Europe, or is involved in a war with a major Power on the continent. Her share, therefore, can be defined as the maintenance of the security of the sea lanes and routes from Europe and America to the Indian Ocean; adequate naval support to the Indian and Regional forces for offensive and defensive operations in the area of combat; co-operation in the mai ntenance of air superiority and generally of affording technical assistance at the highest level as a partner in the defence of the area.

Britain's political and strategic interests in this area will by no means be inconsiderable, even assuming the independence of the units of the region. Her Colonial Empire in East Africa, her influence and authority in the Middle East, her access to the raw materials of the tropical East and her position in the Pacific

generally, apart from the safety of her sea and air routes to Australia—all these are mixed up with the security of the Indian defence area. Her trade with China and India, two of the world's greatest markets, is also of primary concern to her prosperity and strength. Great Britain, therefore, has an undoubted responsibility in her own interest to defend this area and, therefore she is not undertaking a responsibility which she would otherwise not have had to face.

If a Defence Council with the range of functions indicated above is set up, and the work of organising the security of the region is entrusted to it, the main problem which such an organisation will have to face may be defined as the creation of a high standard of technical efficiency in India itself. The actual burden of defence will necessarily fall on India, and, unless the interval of peace is utilised to create in India the minimum standard of national efficiency required for the conduct of a modern war, the whole scheme will fail as a result of India's incapacity to share her part of the burden. How is India to be provided in as short a time as possible with at least that minimum of technical efficiency in the wide range of her war potential? This is the crucial question. The solution for it lies in a large scale technical mission meant to help India to attain the highest standards of technical efficiency. When there was actually the danger of India's communications with England being cut off, this problem presented itself in an acute manner, and the Grady Mission and the Eastern Supply Council were the improvised measures meant to meet that situation.

In planning the defence for the future, we have to start with the assumption arising from the developments in the technique of warfare that at some moment the communication between England and India may be severed. Therefore, to put India in a state of industrial and technical preparedness should be one of the immediate objectives of Indo-British co-operation. That will be possible, if there is a joint technical mission whose business will be to create the minimum national efficiency in every sphere necessary for defence. The services of this joint technical mission should be available also to the other units, especially in the spheres where they have special responsibilities allotted to them.

The defence machinery of the Indian Ocean area will, therefore, consist of a Supreme Security Council of which Britain, India and the other units of the region will be members. This Council will work in close co-operation with the Imperial Defence Committee and the Imperial General Staff in England and such other regional organisations that may exist within the Commonwealth. It will have technical and research organisations directly under it in order that the latest achievements of science could be worked out in terms of defence potential.

This is the outline of India's policy towards the countries of the Indian Ocean area as I visualise it. It is based on the freedom, equal development and political stability of India's neighbours, her own national interests of security and generally speaking in the interests of peace. It does not in any manner conflict with the scheme adopted by the United Nations at San Francisco, and I firmly believe that the future of Britain and India lies in the steady pursuit of the policy broadly outlined above.

THE LAST YEAR IN ITALY

BY COLONEL G. T. WHEELER.

IT has been said that the British Army studies the tactical lessons of its last war so assiduously that it is usually ready to fight it by the time the next war begins. Let it be said at once that no attempt will be made here to study tactical lessons with future wars in view. In any case it would be useless to claim otherwise, for presumably in the next war everyone will be blown by atomic energy, unprotected and unprotesting, into a quieter world. No study or knowledge will be needed for the passage.

The last year of the war was undoubtedly the best for the Eighth Army. It had almost everything it needed and the Germans almost nothing. In fact conditions were approximately the reverse of the first year of Desert warfare. An extra advantage in our favour was that in 1944 our Intelligence was much better than the German Intelligence was in 1941. We suffered very few surprises after the Anzio beach adventure.

In June 1944 the German Armies were in full retreat up the western half of Italy. The British Eighth and American Fifth Army were in pursuit. The Allied Air Forces were taking a heavy toll of German transport, and of their fighting vehicles. By the time the enemy had re-established his front about 100 miles north of Rome, he was decidedly inferior to our forces. His air force was virtually powerless; and he had less than a hundred tanks left. We had an immense air force and more than twelve hundred tanks ready to operate whenever required. He had sufficient artillery to make life uncomfortable in the forward areas, but we had so much that the movement of a single German was often engaged by more than a battery of field or even Medium artillery. We must have had more than ten times his shell power.

The relative strength in infantry is difficult to express. Mere numbers are valueless because one cannot compare a disgruntled Pole, forced into the German army and posted on the Dalmatian Coast with, say a private soldier of the Rifle Brigade driving joyously into Florence. We had only a small preponderance in numbers of Infantry divisions, but ours were stronger in both numbers and quality of men. An exception to this must be made in the case of two German Parachute Divisions and two Panzer Grenadier Divisions; these were among the best of the whole German army and were good in every way.

The characteristic of a good enemy division which is most apparent to our troops is that we never "get away" with anything. They are no more active than a poor division during a quiet period, in fact they are usually less so. But a careless patrol or raid will fail expensively every time. One of the worst tasks forward troops could be asked to do was to capture a prisoner off one of these German Divisions. Later on it became easier as their morale weakened; and, like all the others, their morale broke before the end.

June and July of 1944 were spent in hammering on at the enemy, who disputed each line of hills back to his Gothic Line. It was a fairly simple process. Fach division packed all available artillery on to a Brigade sector and then

attacked, usually at night. The Germans frequently had orders to retire when attacked; in which case casualties were light. If they had orders to hold on the attack was not so happy. It usually succeeded in reaching its objective but was then immediately counter-attacked with vigour and skill. Some very costly battles resulted from these counter-attacks.

The "hill-hopping" tactics were not popular with the troops. It was hard slogging and seemed to give no tangible results, for each successive position was very like the last, and the Germans always managed to slip away in time. There was, at that time, a current joke that a senior officers' course was required for Brigadiers. Each Brigadier would be taken to the top of a hill, given an imaginary lay-out of his troops on that hill and asked what he would do.

"I would attack that high-ground in front of me, because it overlooks my position," would have been the invariable answer—or so the story went.

The next day the procedure would be repeated, and again and again, until he answered:

"I would stay where I well am."

Then he would have passed the course and could return to his brigade.

Of course it was very little to do with any brigadier, as he was only carrying out the accepted policy. The policy worked all right, though German prisoners admitted that it would have been much worse from their point of view if we had taken two consecutive hill-ranges in one operation; as that would have over-run their mortar positions and reaped a much richer harvest at less than double the cost of a single range.

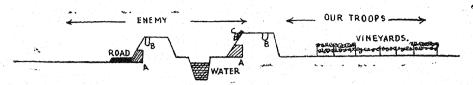
When the time for the Gothic Line battle approached the Army Commander addressed all unit C. O's, and higher. This was a custom in the Eighth Army which had been started by General Montgomery, as he then was. The Army Commander gave his plan in some detail. He was very optimistic of the plan being successful, though it had no novel features.

In the event it was only a very partial success and casualties were fairly heavy. The Germans were able to move reinforcements across the front to meet it faster than was expected. They achieved this by moving in small battle groups based on an Infantry brigade. These groups moved at night, so offered no target to our Air Forces. Albert Kesselring was undoubtedly a very astute defensive general, with a wonderful ability for restoring an awkward situation.

By the time our attack had lost its momentum the winter rains had begun and both sides started digging in. For the rest of the winter the infantry had a really comfortless life. There were very few spare divisions, so periods of rest were rare. In the line the men lived in watery slit-trenches; and were kept on the alert by their proximity to the enemy. The previous winter had been one of long patrols through a wide no-man's-land, but at the end of 1944 neither side was prepared to sacrifice ground for comfort.

The front line passed through two entirely different types of country. In the east it lay in the dead flat, irrigated Po valley. In the centre and west it was still in the northern slopes of the Apennines. The plain sector was by far the more uncomfortable. Both ourselves and the enemy held the line thickly, and in some places there was virtually no No-man's-land at all. Particularly

was this so on the River Senio. The river has high flood banks on either side; a cross section of the river is like this:



- A-Dug-outs.
- B-Fire trench slits.
- C-Low wire entanglement.

The enemy held both flood banks, and his positions were deeply dug into both of them. He used every sort of device of tunnelling, mining and wiring, and occasionally flooded our positions by blowing a gap in the bank. Fortunately it was an exceptionally dry winter and he had few opportunities of doing this.

Many people expressed many theories on the best way of tackling the enemy in this queer situation. The two main schools of thought were the "backward" and the "forward" schools. The former said keep the F. D. L's about four hundred yards from the bank, so that the depth of vines screen you from view, and then let him patrol up to you if he likes; you will meet him on your own ground. The new Army Commander, General McCreery, favoured this method; and both the New Zealanders and the Canadians adopted it. Some of the New Zealanders added an additional refinement in that they lived wholly in houses, booby-trapped the doors and never went outside at all. Food was taken in through a back window. It was a real example of going into winter quarters; and it did the job adequately with virtually no casualties.

The British Divisions as a rule adopted the "forward" policy. They pushed as close to the enemy as they could get and then lived a rather perilous existence some few yards from the bottom of the near bank. When opportunity offered they attacked the near bank and held as much of it as they could, which meant that each side held one side of a high bank and threw grenades at the other. To complicate things further, these attacks almost invariably failed in some places, so in these the enemy still held the whole bank, with the result that both sides fired at each other in full enfilade along the bank.

The "forward" policy was a costly to our men, and unpopular with the units who had to adopt it. It was justified by the Divisional and Brigade Commanders on the grounds that it caused the enemy a lot of casualties. Prisoners who were captured never confirmed this, and it is unlikely to be true because the absence of No-man's-land prevented our artillery from shelling the enemy F. D. L's. When the big attack on the Senio was launched it made little difference whether the start line was forward or back, because those that were forward had to come back in any case to get clear of the preliminary bombardment.

The winter in the hills was more pleasant, though it was certainly no picnic. The climate was the worst enemy; rain, snow and mud. The enemy was frequently aggressive and usually skilfully so. There was however always a

No-man's-land, as there is bound to be in hilly country. This gave patrols a chance, and produced a general feeling of having some elbow-room.

There was one feature common to both plains and hills. It was a desperate shortage of houses. The reason for this was twofold. First, the area had been, and still was, the scene of continuous battles; and, secondly, there was no readily available road-metalling either in the Po valley or on the northern slopes of the Apennines. Most houses had been damaged by bombs or shells so were an easy prey to the Sappers' bull-dozers. These literally razed the houses to the ground; lorries then carted the bricks, stones and tiles away for road making. The wood-work was soon taken for firewood. It must have been ghastly for the farmers when they returned to their houses after we had passed on. They would have found a bare square of land where their houses had stood, and nothing left with which to rebuild. "Povero Italia" was a common expression among them, and will remain a truth for many years to come. The destruction in Italy, particularly of road and railway bridges, was terrific.

The final attack in Italy began in March. It was as usual preceded by a talk by the Army Commander to all unit commanders and higher. It was a very different talk from the previous one. General McCreery detailed his plan quietly. It included several novel features, the most important of which was the use of the strategic Air bomber force to break the morale of the enemy's forward troops. He made no claims for the merit of his plan. He stated simply that it was his best effort on our behalf. If it succeeded it would be because of us; if it failed it would be because of him. One left with a feeling that one was going to fight for one's own cause, not for someone else's.

The handling of the attack was also very different from that on the Gothic line. We felt from the start that it was being controlled by a master-hand which was always several moves ahead of the enemy. Such was, in fact, the case.

The strategic bombing was prepared with great care. The leaders of the Air formations flew over the target area beforehand so that they could see what the target looked like. When the real attack began the formations flew in along a wireless beam and met a cross-beam at the point where it became safe to bomb. As a double insurance an A. A. barrage was put up 5,000 feet below the aircraft, also at the safety bombing line. In spite of these precautions two waves, out of a total of over forty, dropped their bombs on our own troops, and caused a certain number of casualties. In each case the mistake was due to the extreme similarity between all the rivers which run into the Po. They run parallel to each other and are all about the same size. Even from the ground it is difficult to tell one from another. Two waves, not on the same front incidentally, decided to work to their knowledge of the target area rather than to the safety devices of beam and flak. Each bomber was carrying an enormous number of 20 lb. bombs. Those who were in the area of the mistaken bombing said it was like a terrifying thunder-storm rushing towards them, and they confirmed the Army Commander's belief that it was bad for one's morale.

The line of the Senio was captured with no delay and very light casualties. The next river followed the next day, and from then on the enemy was given no time to move his reserves to where they were needed. Nor did he ever reform his whole line again. In many ways the battle was handled as Foch handled the last battles of 1918; an unceasing series of blows, each delivered at the time and place where it would hurt the enemy most.

The attack of the American Fifth Army on the left (west) of the Eighth Army, started a week later than the Eighth Army attack. It was the left arm of the pincer. It also went according to plan. The most remarkable feature of it was the astonishing mobility shown by the American 10th Mountain Division. This Division was composed largely of the people we know as "Hill Billies," whose habits we study in Esquire. It had been very highly trained in America and only arrived in Italy at the end of 1944, so was completely fresh. We heard they had swept the Germans out of the northern slopes of the Apennines, and it seemed the next day that we heard they had reached the Alps. How they did it, we never heard; perhaps "Gramma" was after them with her chopper.

All serious fighting on the Eighth Army front ended at the Po. The Air Force did a wonderful job at all the crossings; and the Germans left virtually all their heavy arms south of the river. They were very disorganised when they reached it, and even more so after they had crossed it. The final stages of our pursuit saw many incidents which could never have been overlooked by the stewards of the roughest race course. Senior officers in jeeps, cavalry regiments in armoured cars and even whole Divisions were liberating towns with a complete disregard for the rules about bumping and boring. The final surrender came as a surprise to the forward troops. We had no idea the enemy was in quite such bad case.

The three days which followed the news were rather dangerous; everyone celebrated in his own way. A lot decided to do so by firing off their weapons into the air; which was all right up till about 8 p.m. but after that many had lost the power of distinguishing between horizontal and vertical and bullets whistled merrily through the undergrowth.

It lends tone to a military article to finish with a few well-chosen lessons. In this case the lessons will have no relation to the article, but that will not make it unique among military writings.

Long after the last war a committee was convened to study the enduring lessons of that war. The results were published as the Bartholomew Report. One of the main lessons they adduced was that unnecessary aggressive action tends to lower rather than raise morale; and that the British soldier does not, in fact, lose his offensive spirit if allowed a period of passive defence. The winter campaign in Italy amply confirmed this theory. The British Divisions lost a lot of men by their policy of pushing at the enemy wherever and whenever they could; and they gained no ground that mattered a hoot so far as the final attack was concerned. When the attack came it was noticeable that these Divisions were tired, and lacked the dash of the New Zealanders and Canadians who had taken things easier. It may be a hard thought, but it seemed in many cases that British commanders were driving their men to unnecessary aggressive action to further their own reputation. A sort of rivalry between neighbouring commanders seemed to arise. That is unforgiveable. There is no commander in the world who has the right to sacrifice the life of a single man in the cause of his own reputation. The atomic bomb will not change that solemn fact.

This last year in Italy saw the final product of a very highly organised amenity organization. It is probable that it will be used as a model for the future. Many unit commanders would say "God forbid" to that idea, not because it was bad, but because it missed its true psychological purpose. Let us consider what the most useful amenities are. Most men would put a bath

and a regular mail service top. The mobile bath units in Italy were often within walking distance of the forward troops and always within short motoring distance; they provided a change of underclothes which was the most popular feature of them. The mails were well organised and a Divisional move only delayed the arrival of mail by a few days.

Cinema-shows in the forward area were attended by surprisingly few. The cinema is largely a habit, and it is obviously impossible for a forward troop to develop the habit.

Extra food is only helpful when it is a definite addition to the rations, like the issue of turkey at Christmas. Producing a few sweets in B Echelon area is not a workable amenity; for, however carefully the distribution is planned the forward troop will always get less than the rear-ward one; or at any rate will think he has, which comes to the same thing. Rations are so good in war that the men's stomachs are not good media for morale-raising. So much for the forward areas, where admittedly there is not much scope.

In rest areas the men want to get their clothes and equipment into good order and to relax their bodies, and minds. In Italy the amenity services were somewhat concentrated on producing a gay town life. This has three grave disadvantages. First, it does not prepare a man to go back into the line, it makes him dread the return; secondly, it tends to make him resentful of the Base troops, who are obviously enjoying that sort of life all the time; and lastly it is, at best, a cheap imitation of the real thing. It does no good to a man to see a rather shoddy Ensa "leg-show" the day before he returns to the line, particularly if he sees the ladies of the show returning to supper in the Officers' Mess of a Base Workshop after it is over. Female legs and Base Workshops are both Profitless thoughts in a slit-trench.

This is all destructive; and what else can a soldier be? It is the psychologist's job to say how you rest a man's mind in preparation for further hardship. He should be asked. The amateur or professional amenity officer can arrange for his mind to be diverted away from hardship; but that is not the object.

The R. A. F. establish mountain camps where they send their air crews for recuperation. The life is more like that of a Cumberland shepherd than that of a London play-boy.

The only naval rating I have ever seen on a rest period, was walking down a side-street singing "Don't fence me in"; and appeared to be in no need of psycho-analysis.

Flying 100 Years Ago

"It was just over a hundred years ago, in 1830, that one of the first bogus companies was formed, called the Aeronautical Association, by gentlemen in London who invited and obtained large sums of money from the public to engage in balloon flights of survey and exploration over Equatorial Africa.

"A year or two later there was the case of the 'Eagle', an airship built and set up in a by-way of Kensington in 1835. A large number of tickets were sold to the public, advertising that it would conduct a regular service between London and Paris. Later an infuriated mob broke up the machine."—Mr. C. Shawcross, M.P., speaking in the House of Commons.

"SAFE IN BRITISH HANDS AT SINGAPORE"

BY CHARLOTTE BUDD.

HAVE you ever thought what it would be like to arrive in a country without any money and not to miss it; without any newspapers or radio; in fact without any signs of life from the outer world? That was life such as I found it in Java during September and the first weeks of October, 1945. Nobody had any money; nothing could be paid for. Everyone signed for everything—but no one knew who would have to redeem those chits one day....

The journey by plane from Singapore to the island was fascinating. The Java Sea is strewn with small islands, covered with thick forests, encircled in a border of golden seas and, bathed in sunlight, floating, as it were, on an ever-moving cloth of green and gold brocade. Java looked pretty from the air. It was difficult to imagine that just then this island harboured so many dark passions.

From Tandjong Priok, where the Sunderlands descend, a long, straight, dull road stretches itself to Batavia along an equally long, straight, dull canal. Why the road is there is not clear; hardly a soul ever walks along it, and in view of this fact the presence of extremist sentries standing guard with rifle and bayonet complete seemed aimless.

Batavia was full of cars and other extremely quick-moving vehicles, driven by Indonesians. All these vehicles, including tram-cars, also houses and walls, carried the nationalist colours (red and white) and displayed blood-curdling slogans in Malai, Dutch and English.

Hôtel des Indes made a staggering impression. Before the war it was the best-known hotel of the Dutch East Indies. Stout Dutchmen used to sit at small tables, eating steadily and stubbornly from plates piled up with rice, long streams of Javanese waiters, one behind the other, winding themselves between all these tables, each waiter serving one of the 20 to 25 dishes that constitute the famous rijstafel. Except for the gentle tinkle of spoons and forks and the dreamy music from the orchestra at the back of the dining hall, no other sound was heard in the whole hotel.

Now the place was full of noisy and nervous activity. It was overcrowded with refugees from the camps, most of them trying to act as RAPWI authorities, far from successfully. The perpetuum mobile seemed to have been reached here. The confusion was beyond description. No one seemed to know or do anything; yet everyone was frightfully and constantly busy. Enquirers were stared at aghast; the only information given invariably consisted of directing enquirers to room number so and so; the person there might be able to give information; which he did; he referred the enquirer to room such and such.

It was obvious that no one could achieve anything in this moving chaos, where the Dutch, tired to death, moved against, almost through each other, with unseeing eyes and pale haggard faces. The place was a nightmare—yet not the worst one in Batavia.

There was hardly anything to eat; breakfast consisted of a cold, leathery egg, having been fried the evening before, and some fruit. It was difficult to have lunch; one was either too late or too early; the exact lunch time few found

out. There was a kind of sago bread, just like rubber, which had to be chewed and chewed and chewed. No one got beyond that. Of the dinners, bananas formed the best part.

For those having known the hotel in its halcyon days, the sight of all these pale, emaciated Dutchmen, eating and chewing in deep silence, grimly, without a smile, without a word, was most depressing. One knew the horror that gripped all those hearts: most of them had their wives and children still in camps in the interior, in danger of being murdered. Everyone spoke in whispers, probably due to camp life, and the general suspicion of each other and everyone else; of each other, because everyone now tried to obtain the best job; of everyone else, because the Japanese General Staff was still in Hôtel des Indes, an infuriated Indonesian population was waiting for them outside the Hôtel gates, and the British were there starting to liquidate the question of the Japanese prisoners of war and repatriation of their own prisoners and internees, but was it not more likely that the British meant to steal their Colony?

During a whole week only once a child's sudden, loud laughter was heard in the hotel; everyone looked round, a few women started; the mother scolded it shrilly.

If Hôtel des Indes was depressing beyond hope, Tjidang Camp was horror itself. It consists of a city quarter on the outskirts of the town, with a few streets lined with bungalows, the whole closed in by barbed wire. Normally this city quarter might house perhaps 1,000 persons. In October there were still nearly 10,000 women and children.

Consequently the place was incredibly full; children were all insufficiently dressed and went about barefooted; most of the women, too; their way of dressing would have been considered most daring at a seaside resort. The filth and dirt were incredible; the deep gutters lining the roads were filled with mud. Refuse was simply thrown on the streets more or less \acute{a} la Calcutta, but there at least bins are provided.

All the rooms in the bungalows were overcrowded; a small side room of 8 by 12 feet generally housed four people, bedding being spread on the floor; while in a normal-sized drawing room 12 to 14 persons lived: each minute kitchen even contained a bed; the cooking was done by the women outside. The confusion was unbelievable: the streets were filled with half-clad women and young boys, carrying tubs of water between them; or plates heaped with rice; everywhere women were sitting on the ground cooking something in pots on earthen fire places built before the houses; again other women and children were washing clothes fiercely, passionately. And yet with all this dashing about and grim work nothing was clean, nothing was tidy.

There was a "hospital" too, improvised in another bungalow; it was rather clean inside; but 10 beds in one living room; and the backyard packed with cases and dirt and heaps of refuse. An old Scotch lady of over 70 was there too, with a broken hip, but certainly not with a broken spirit; a bright, sparkling ray of sunshine in this place of gloom and suffering.

And there was also an asylum towards the outside of the camp; the place might have been servants' quarters in the olden days; each demented woman was by herself in a dark little room. Like that the poor wretches in the Middle Ages must have been housed. However, there was no better place for them, and they were anyway safer inside the camp than outside.

These thousands of women and children had been living for three and a half years in Tjidang Camp, where they had no privacy, nor rest, and to that had now been added the daily anxiety of the riots going on outside and of the possibility of them all being murdered one day.

By and by many of these women and children found their way to Singapore, all being evacuated by plane; one of the rest camps in Singapore was Sea View Hotel, and soon the first cables were sent from there to Holland: "Safe in British hands at Singapore." They arrived in batches, exhausted, stumbling out of the lorries that brought them from the airfield; the women with the same sallow, pale faces, with dresses that screamed poverty, children shy and clumsy, with the sly, suspicious look born from $3\frac{1}{2}$ years' fear of the Jap. The first few days the kiddies would just sit on the steps of their rooms overlooking the sea, staring vacantly, more like old men and women than little boys and girls of seven and eight. It took a few days before they could be persuaded to run about wherever they wanted and that the Jap would not come and beat them.

Most women burst into tears on entering the rooms allotted to them; such a lot of space, privacy again, running water, English tubs, beds and fans and mosquito nets; British Red Cross girls, with happy, cheerful faces, awaiting them at the lorries, welcoming them, helping them with their luggage (and such poor luggage too, just one or two very small bundles), making their beds ready, taking the kiddies along with them to have some food and coaxing them to the FANY'S canteen for chocolate and cake. In a few days the little old men and women had vanished and happy children were romping about, giggling, laughing, playing, running and screaming, and altogether making far too much noise.

The women were pitifully thankful for all the help given. A few of them remarked that the thing that struck them most when coming to Sea View was the fact that they were asked to do things, never ordered. In the beginning many indulged in describing the horrors they had gone through; most stories were terrible enough. It was good policy to listen patiently to them; most of them wanted to have it off their chest. But once they had told their tale they were encouraged never to look back again upon the terrors that lay behind them but to look ahead, where so much work was waiting for them.

There were two amongst the hundreds who passed through Sea View who had realized that even life in a Japanese internment camp can have its funny side; they never spoke about the horrors and they had been in a worse camp than Tjidang Camp; they came from Sumatra. It was a pleasant change to sit with them now and then and listen to their description of camp life. They had managed to save a few bits of jewellery, an engagement ring and a wedding ring, from the Japanese.

Here is their prescription of how to hide jewellery from camp authorities. You melt candle wax, in which the rings are sunk, after which you knead it artistically into a clumsy lump; you then roll it in the mud and for all the world it then looks like a common stone: after that you throw it carelessly anywhere in the compound. When you are very clever, you make several of such stones to avoid too much attention being paid to the only one, the precious one; but that of course has the drawback that suddenly you do not know any more which is the precious one and which are the sham ones. A great deal of anxiety is then gone

through and much remelting in the dead of night. Now and then you lose your stone altogether, having forgotten where you threw it, like a dog having forgotten where he buried his bone, or a cat who can't remember where she hid her kittens.

The Red Cross stores at Sea View made the former internees gasp with wonder. The first consignments of Red Cross stores were sent to Singapore by the Australians; and what quantities and what good things they sent! Everything was of the best, and this fact more than anything else has helped to make the tired, slovenly, women real women again so soon, dying to use the lovely things given to them; there were celanese nighties and slips and undies; soft woollies for children; night gowns for babies (many of the children, born in camp, had never had a night dress in their life) lipstick, rouge, powder, mirrors; knitting wool for the women; pipes and tobacco for the men (a second lot of wool and pipe was sent out by fast airmail by the Indian Red Cross, when the first consignment was exhausted).

It was good to see them sitting on the lawn, the woman knitting happily away, comparing patterns and stitches with each other; the latter dreamily smoking-their pipes; the children playing under supervision of the Red Cross girls, or going out in trucks and "bucks" for drives through the town and in the harbour. There were also frequent visits to British warships where everyone was entertained lavishly by the Navy; there were cinema shows at Sea View every other night; musical recitals; Church Services, kindergarten and English classes, knitting circles, a library and games. Off and on there was an ENSA show, the one where Marie Honri sang and played being extremely successful; she sang her songs in many languages she even sang one in Afrikaans. By the way, if you have a chance to hear Marie Honri, don't feil to do so.

Generally once every two weeks a batch of RAPWI's left Sea View, off to the ship that would take them to the U.K. and thence to Holland. And all were invariably sorry to leave a place where they had had such a happy time.

Christmas approached and the Red Cross girls decided to give all the 80 children, amongst whom were several Swiss children, a grand Christmas. Preparations went ahead in their rooms at night, but soon it leaked out that the "Sisters" were making things ready for Christmas and then suddenly they all came forward to help. When Christmas Day dawned the excitement in the Hotel was great; the Officers' Mess was decorated; tables laid out; a Christmas tree stood in the corner of the room; besides all the tables carried numerous exquisite little Christmas trees, made by British Navy friends. Under the tree the presents were spread out, several for each child, packed in coloured paper, the latter obtained at great pains in Singapore's bazaar. The children sat down at the feast; the Christmas story was told by one of the former Dutch internees, then suddenly there was a noise outside.

Father Christmas himself had arrived by staff car, and not one of the adults in the Hotel recognized in the dear old gentleman, Bob Gerber, the Swiss Hotel Manager. He presented the gifts to each child with a little speech. All the toys had been supplied by the Indian Red Cross, collected from children in India; it was a pity that the tiny givers could not see the boundless joy of the little boys and girls who received their toys.

And then the children had their surprise for the British Red Cross Sisters; one of the elder ones started playing her violin and then they all sang with heavy Dutch accents, yet so sweetly as only little children's voices can sing,

an English carol. Two verses they sang, even the tiny tots, and when one considers that not one of these children spoke a word of English, one can imagine how much hard work even the little ones had put in to master these two verses.

When the feast was over, they all trotted off in their pretty Australian frocks and suits; each family of children received their own little Christmas tree with candles to burn in their rooms.

One hour afterwards the lorries came to carry some 45 guests off to the ship, which was leaving that evening for the U.K. The children were helped into the lorries. Father and Mother were allowed to carry their toys for them; but not one parted with his or her Christmas tree, clutching it tightly, while the British Officers hoisted them in the lorries. And so they went off to Holland.

Has all the work done for the RAPWI's been worth while? Certainiy. It gave back to all those who passed through this Hotel in Singapore their confidence and trust in human nature; it has helped to make the children happy, fearless children again; it has enabled these former internees to help first themselves and afterwards others: how many women in the hotel stepped forward to help and knit woollies for the Red Cross Store, when babies' woollies started running short. And at least in Sea View a spirit of friendship and mutual appreciation has grown up between British and Dutch.

And to those who through the war years worked for, and gave generously to, the Indian Red Cross go out in full measure the warm thanks of thousands of P.O.Ws. and internees, who will for ever remember that in the midst of a terrible war the spirit of Christian charity flourished.

Indian Army Wins Over 6,000 Awards

Nearly 6,300 awards have so far been made to the Indian Army for gallantry and meritorious services during the late war. Awards for gallantry alone total about 4,800. These include 31 Victoria Crosses, four George Crosses, 252 Distinguished Service Orders, 347 Indian Orders of Merit and 1,311 Military Crosses.

The Infantry has earned about 4,000 awards, including 29 V.Cs., one George Cross, 29 M.Cs. and 446 Distinguished Service Orders, while the Royal Indian Engineers and the Royal Indian Army Service Corps, each have about 350 awards to their credit. Of the 300 awards won by the Indian Armoured Corps, 21 are Distinguished Service Orders and 88 Military Crosses.

The invaluable and gallant services rendered by Army doctors to front line troops have earned the Indian Army Medical Corps 140 awards for gallantry alone, among them eight Distinguished Service Orders and 70 Military Crosses.

Over a hundred awards go to the India Army Signal Corps. One Distinguished Service Order and 8 Military Crosses are among them.

The Indian Artillery have over a hundred awards, which include one Victoria Cross, six Distinguished Service Orders and 38 Military Crosses.

FIELD-MARSHALS OF THE INDIAN ARMY

BY BRIGADIER H. BULLOCK, O.B.E., F.R. HIST. S.

THE Indian Army has had twelve Field-Marshals, the first of whom attained that rank in 1870 and the latest in 1926. My present purpose is not to give an account of their military careers, which are for the most part well known, but to examine them as a class. For, viewed as such from various angles, they present some unusual features.

A full list is given at the end of this article, but their names, in order of promotion, with some basic dates, may conveniently be tabulated:—

	Home.	Born.	First Commis- sioned.	Became F.M.	Died.
Pollock		1786	1803	1870	1872
Napier	••	1810	1828	1883	1890
Grant	••	1804	1820	1883	1895
Stewart	•••	1824	1840	1894	1900
Roberts		1832	1851	1895	1914
Chamberlain		1820	1837	1900	1902
Norman		1826	1844	1902	1904
Brownlow	• •	1831	1847	1908	1916
Egerton	• •	1848	1867	1917	1921
Barrett	• •	1857	1875	1921	1926
Birdwood	• •	1865	1885*	1925	
Jacob	• •	1863	1882	1926	
		1			

The age on promotion varies from 84 (Pollock) and 80 (Chamberlain) to 60 (Birdwood), and the length of service on promotion from 67 years (Pollock) to 40 years (Birdwood). The average age is $70\frac{3}{4}$ years, and the average service 53 years.

The strength and establishment of Field-Marshals of the Indian Army have varied. Originally there was nothing in the way of a fixed allotment. After the first (Pollock) died in 1872 after two years' tenure, there was no further promotion until 1883 (Napier), followed a few months later by another (Grant); but Napier was doubtless regarded as technically a Royal Engineer and not Indian Army. Grant, however, was still alive in 1894 when a second undeniable Bengal Infantry officer (Stewart) was promoted; and then the Indian Army had three Field-Marshals defacto even if only two of them were considered dejure as of the Indian service. Roberts—probably reckoned officially as British service, though a former officer of the Company's —was promoted a few months after Grant's death.

^{*} Previously commissioned in Militia, 1883.

Henceforward the establishment was evidently a single Marshal, until the quota was doubled on the promotion of Sir William Birdwood in 1925; and at two it still remains.

The average age at death of the first ten was about 78½, and their average tenure of the rank was about 5½ years. The two others, happily still living, have considerably improved on this figure with scores of about 20 "not out." It is noteworthy that only four officers of the Indian Army have attained the supreme rank out of the many thousands who have entered it since the Crown took it over after the Mutiny, nearly ninety years ago. (The first eight on our list were all East India Company's officers). The rather depressing conclusion seems to be that, however long an Indian Army officer lives and serves, and whatever his capacity and attainments, his prospects of a Baton are so infinitesimally better than a nullity as to be indistinguishable therefrom.

For ten officers, all of whom have served thirty, forty, or more years in India in "pre-prophylaxis" days, to average 78 seems remarkable, but the very small cadre of Field-Marshals is not a representative cross-section of the Indian Army, partly because the rank itself necessarily depends on two factors, one of which is itself longevity, and the other is merit.

Of the twelve Marshals, the Bengal Army provided eleven, the Bombay Army one (Jacob), and the Madras Army none. Two were artillery officers (Pollock and Roberts), one a sapper (Napier), and one a cavalryman (Birdwood), the rest being from the Infantry.

Half of them were sons of army officers, but Sir Arthur Barrett's father was a clergyman, Lord Birdwood's a member of the I.C.S., and Sir George Pollock's a saddler. Stewart's father was a rather nebulous subaltern in a Scottish regiment of militia (in which he held the rank of lieutenant for fifty years!); Norman's, "an enterprising but not too fortunate a merchant" of Cuba and Calcutta; and Chamberlain's a diplomat-baronet.

Of all the fathers of Field-Marshals, the saddler had the most remarkable progeny. David Pollock, saddler to King George III, was father of Sir David, Chief Justice of Bombay; Sir Frederick, Lord Chief Baron of the Exchequer, was created a baronet; and Field-Marshal Sir George. Amongst the descendants of these three brothers are to be found many eminent men in various walks of life, far too numerous to mention here—examples are the late Viscount Hanworth and the Bishop of Norwich.

Each of the twelve Marshals had the G.C.B., but Roberts was the only one to receive the V.C., K.G., K.P., O.M., or (rather surprisingly) the G.C.I.E. He was also the only one to be created Viscount or Earl—Baron Roberts of Kandahar in Afghanistan and of the City of Waterford, in 1892, and Viscount St. Pierre and Earl Roberts of Kandahar in Afghanistan and Pretoria in the Transvaal Colony and of the City of Waterford, in 1901. The other peers are Napier (Baron Napier of Magdala in Abyssinia and Carynton in the County Palatine of Chester, 1868) and Birdwood (Baron Birdwood of Anzac and Totnes in the County of Devon, 1938). Pollock was created a Baronet "of the Khyber Pass" in 1872, some thirty years after his exploits there; and Lords Roberts and Birdwood were, before their elevation to the peerage, similarly rewarded in 1881 and 1919 respectively. Stewart also was made a Baronet, in 1881, for his service in the Second Afghan War.

Eight of the twelve had the G.C.S.I., the exceptions being Grant and Barrett (who both had the G.C.M.G., as has Lord Birdwood), Egerton and Brownlow, Lord Birdwood has the G.C.V.O.

Only four were "pucca" Commanders-in-Chief in India, Napier (1870-76), Stewart (1881-85), Roberts (1885-93) and Birdwood (1925-30), though only the last held the appointment as a Field-Marshal; but the office was held temporarily by Grant (1857) and Sir Claud Jacob (1925), as well as by Lord Birdwood in 1924. Roberts was C.-in-C. in Madras (1881-85), Ireland (1895-99), South Africa (1900-01), and finally Commander-in-Chief of the Forces (1901-04). Some others also held appointments as C.-in-C. outside India, e.g., Grant (Malta, 1867-72).

Though none of them was ever permanently appointed Viceroy and Governor-General of India, Napier acted as such for about ten days at the end of 1863, on the death of the Earl of Elgin, and Norman actually accepted the office in 1893 in succession to Lord Lansdowne, but changed his mind almost immediately. Napier was Governor and C.-in-C. of Gibraltar, (1876-83) and Norman Governor of Jamaica (1882-87) and then of Queensland (1889-95).

The post of Governor of Chelsea Hospital was held by Grant, Stewart and Norman, and that of Constable of the Tower of London by Pollock and Napier. Three were Commanders-in-Chief of the Madras Army (Grant, Roberts and Chamberlain), but only one (Napier) commanded the Bombay Army.

Brownlow's last and highest military command was the Rawalpindi Brigade, and thereafter his only military appointment was as Assistant Military Secretary to Field-Marshal H.R.H. the Duke of Cambridge, Commander-in-Chief of the Forces. After ten years in this post, he spent nearly twenty years on the shelf before receiving his Baton at the age of $76\frac{1}{2}$. He is not even included in the Dictionary of National Biography, but he is the only one whose name is borne by a unit of the Indian Army—the Second Battalion (Duke of Cambridge's Own) (Brownlow's), 14th Punjab Regiment, which he raised as a subaltern in August 1857. Yet his case is not so strange as that of a comparatively recent Field-Marshal of the British Service, Lord Nicholson of Roundhay, who never commanded a unit or formation in peace or war, and who became Chief of the Imperial General Staff although he never went to the Staff College.

Grant's second wife was the daughter of a Field-Marshal, Viscount Gough. He married her at Simla in 1844. One of Napier's nine sons married a daughter of Field-Marshal Sir George White, V.C., G.C.B., O.M.,G.C.S.I., G.C.M.G., G.C.I.E., G.C.V.O. A son of Pollock's was killed at Moodkee, when serving as a lieutenant in the Bengal Horse Artillery; Lord Roberts' only surviving son died of wounds received at Colenso in 1899; and two of Egerton's sons were killed in the First World War.

We may conclude with a formal list:-

- Sir George Pollock, Bart., G.C.B., G.C.S.I., Promoted Field-Marshal, 6 June, 1870.
- Sir Robert Cornelis Napier, Baron Napier of Magdala, G.C.B., G.C.S.I. Promoted Field-Marshal, 1 January, 1883.
- 3. Sir Patrick Grant, G.C.B., G.C.M.G. Promoted Field-Marshal, 24 June, 1883.
- 4. Sir Donald Martin Stewart, Bart., G.C.B., G.C.S.I., C.I.E., Promoted Field-Marshal, 26 May, 1894.
- Sir Frederick Sleigh Roberts, V.C., K.G., K.P., O.M., P.C., G.C.B., G.C.S.I., G.C.I.E., Earl Roberts of Kandahar and Pretoria. Promoted Field-Marshal, 25 May, 1895.

- 6. Sir Neville Bowles Chamberlain, G.C.B., G.C.S.I. Promoted Field-Marshal, 24 April, 1900.
- 7. Sir Henry Wylie Norman, G.C.B., G.C.M.G., C.I.E. Promoted Field-Marshal, 26 June, 1902.
- 8. Sir Charles Henry Brownlow, G.C.B. Promoted Field-Marshal, 20 June, 1908.
- 9. Sir Charles Comyn Egerton, G.C.B., D.S.O. Promoted Field-Marshal, 16 March, 1917.
- 10. Sir Arthur Arnold Barrett, G.C.B., G.C.S.I., K.C.V.O., Promoted Field-Marshal, 12 April, 1921.
- 11. Sir William Riddell Birdwood, Bart., Baron Birdwood of Anzac, G.C.B., G.C.S.I., G.C.M.G., G.C.V.O., C.I.E., D.S.O. Promoted Field-Marshal, 20 March, 1925.
- 12. Sir Claud William Jacob, G.C.B., G.C.S.I., K.C.M.G. Promoted Field-Marshal, 30 November, 1926.

Note.—Degrees honoris causa (LL.D., Litt. D., D.C.L., etc.) have not been included.

OUR INFANTRY

By G. B. S.

WORLD War II, like all wars and small or large scale operations, has brought out some very good lessons, the most important being the value of Infantry in almost every type of land battle. Field-Marshal Montgomery is said to have once remarked "Infantry is perhaps the least spectacular of all arms in battles, but still without it you can do nothing, nothing, absolutely nothing."

The Atom bomb, which was about the greatest invention of this last War, can obliterate towns or portions of a country. The Air Force, Navy and the Artillery can cause unlimited destruction. The Tanks can encircle or break through to an objective and retain it for a limited period, but to hold a country, a town, a village or an area, Infantry is essential.

The terrain of a country, the weather, the rain, swamps, streams, maintenance difficulties and various other similar factors at one time or another draw a line beyond which the armour cannot go. The infallible foot soldier still keeps going. It is his ability to adapt himself to the circumstances so easily and in such a short time which makes the Infantry indispensable.

The changes that have come into the training of an Infantry soldier in various weapons and Infantry tactics and their employment in battle are almost phenomenal. He has to be able to fire very accurately the rifle, Bren Gun, Sten, pistol, M9A1, 36 Grenade, 2-inch and 3-inch mortars; to detect and lift booby traps and mines; to use wireless; and at times to carry out less technical engineering work. He has to be physically and mentally fit to fight efficiently on flat or broken ground, on mountains, in marsh or paddy at times more than waist deep, in thick jungle, in snow and in the worst of heat.

During attack, with armour in support, when the country becomes close, he leads the armour. In defence he has to destroy tanks with his M9A1, and very often take the first blow from the enemy's force before the armour and more Infantry can be manœuvred round to annihilate it. It is the spirit of adventure, personal courage, high morale and the traditional spirit of every man of this arm which enable him to fight battles single-handed on many occasions.

In view of what he has to perform in battle, it sounds odd, but is true, that the Infantry Sepoy does not get any Corps pay, with the result that when a man enlists, he normally picks a slightly more lucrative line unless he has some form of family link with an Infantry Regiment. A financier would say "That is all right. Our Infantry is still as good as any in the world." Too true, it is,

This article was redrafted by the author from manuscript notes left by the late, Lt.-Col. Sarbjit Singh Kalha, D.S.O., 1 PUNJAB Regt., who was killed in action near SOURABAYA in Eastern Java on January 11, 1946. Colonel Kalha was one of the outstanding Indian officers in the late war. He was commissioned in 1936, and after serving for a year with the Argyll and Sutherland Highlanders, he was posted to the 2-Bn. 1st Punjab Regt., which he was commanding when he died. He was awarded the D.S.O. for his conduct in the battle for Ngankyedauk Pass in Arakan, and received the decoration from the hands of His Majesty in 1944. He was the first Sikh officer to attend the Staff College, Camberley, to which he went in May, 1944. After returning to India in January 1945 he served as Brigade Major in Sialkot, and in August last again became Commanding Officer of his Regiment. His was the first unit to land on Singapore Island on September 5, 1945.

and in fact better than most. We must make it even better. We must make such scales for I. O. Rs. pay and allowances that when a civilian decides to join the armed forces of our country, his choice of arm should depend on his liking and his suitability for a particular arm rather than on a few more rupees.

The Specialists, Signals and Engineers, have always rightly had priority over the educated man enlisted into the army, because the areas from which our soldiers were taken were limited owing to the martial and non-martial theory, and many educated men were not coming forward as Sepoys. Now that the question of "martiality" does not arise, we have a much wider field to select the men from.

Every effort should be made to get men with some education into the Infantry. If the decision is made about having no more V. C. Os. in the Indian Army, we will need literacy in the ranks even more. A Sepoy must aspire to command his battalion before retiring, instead of at the stage of Subedar-Major or Subedar as at present. The idea of labouring up to the rank of Havildar and then retiring cannot be much incentive for the average man to enlist.

It is one thing to be an efficient soldier with character, good powers of command, initiative, sense of responsibility, sound professional knowledge and to win confidence of those above and under command. It is a different thing altogether to learn the least, do the least, have no sense of responsibility and be always trying to get into the least difficult or tiring job. The former is an efficient soldier and the latter is a liability to the country and to his unit and comrades.

When one comes to select a soldier from a crowd, one is very often impressed by the person who is outstanding on the drill-square and in training, and not so bright in the field. What we want is a man with a combination of guts, education, intellect, initiative and a high sense of responsibility in him. In spite of the improvement in the types of weapons, increasing numbers and their range, the success of the battle still depends largely on the guts of the man behind the weapon. This factor will always remain paramount.

In view of the present political situation in the country, even a glimpse into the future can only be limited. One thing, however, is certain, that India will have a larger Army than pre-war, and that all the lessons learnt during the late war will be embodied into its new organisation and administration. May I list a few of these lessons?

First, this war has taught us that Infantry is the main arm of land forces, others are mainly supporting. They help the Infantry forward. If the armour captures an objective Infantry must come to hold it. If armour breaks through an area, Infantry must mop up, clear and finally hold it. All these points only go to prove the famous remark of Field-Marshal Montgomery, quoted above. At the same time, it needs no explaining that without the active support throughout of other arms Infantry cannot advance very far, nor can it hold ground already captured.

We have also learnt that co-operation between Infantry and the supporting arms is essential. We must know each other before stepping on the battlefield. All those who have spent the major portion of the war with Indian Divisions appreciate how much it means to be back in one's own formation after a short spell away. It is imperative that we stay on as Divisions and move to the N.W. Frontier or back to India as a formation. While in India, Divisions should not be dispersed over an area of more than a hundred miles. Brigade groups should stay together, with temporary composite detachments away as necessary.

For example, Division H.Q. Group, Rawalpindi, with Brigade groups, JHELUM, ABBOTTABAD and MURREE.

The second obvious point is that Infantry must be given higher priority for selection of men.

Thirdly, the basic pay of the Indian Other Rank of every arm must be raised considerably from Rs. 18. Perhaps the financial authorities have worked out what the effects of elimination of V.C.Os, if it is decided upon, and introduction of Indian Commissioned Officers as Platoon Commanders, is going to be on the Indian Army budget. Whatever the implications, it is high time that the Sepoy's basic pay was brought up to a reasonable standard. Over and above that, he should also be granted marriage and children's allowance.

A suggestion is:

Sepoy's Basic Pay ... Rs. 45 p.m. Wife's allowance ... Rs. 20 p.m. Each child (up to max. of three) Rs. 10 p.m.

Further scale to the ranks of Naik and Havildar to be fixed accordingly.

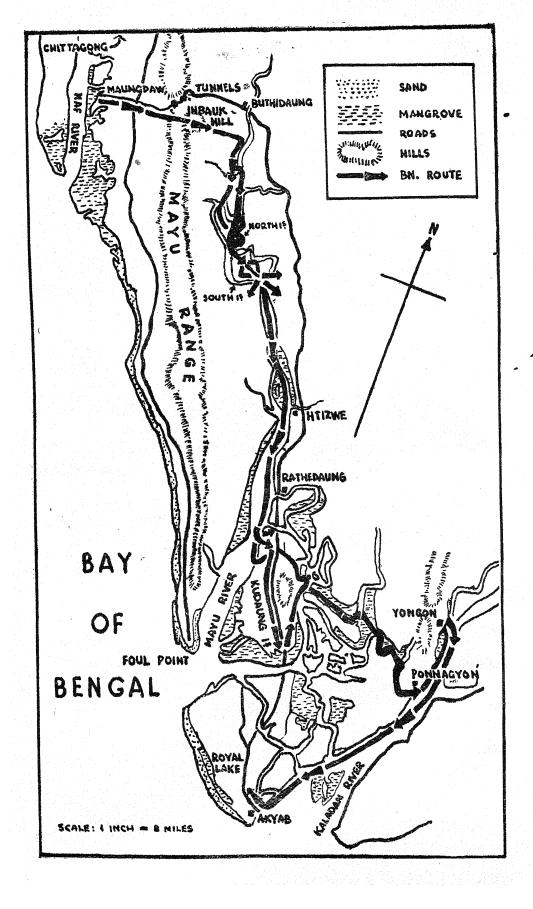
Fourthly, the institution of the N.C.O's Messes must be introduced. It is one of the means of forming brotherhood among N.C.Os. and to understand and help each other. Its value in war needs no explaining.

Fifthly, our men must get to the stage of eating from the same kitchens. Our comrades in the R. I. N. and R. I. A. F. have done so ever since they were formed.

Sixthly, we must cut out the followers except sweepers. Everybody else should be a soldier, fit and trained.

Indian Infantry in this war again proved its gallantry, outstanding courage and everything else that goes to make an army first class. Other arms have taken no smaller share in achieving our victories and fame. We could not have done it without a thorough understanding of each other, living with each other during training, and by sharing trenches in thick battles.

For the first time in a major world war, our troops have had the opportunity to fight desperate, bloody battles under our own Indian Company, Battalion and Brigade Commanders. The remarkable show put up in each case needs no saying. It was an experiment and it has proved too successful to leave any doubts. The standard is set. Again it is up to us to create such conditions of pay, living and understanding not only among the ranks of all the defence services, but also with the civil population. We have the *esprit de corps* and tradition.



ROLLING DOWN THE RIVER

By LIEUT.-COLONEL F.J.C. PIGGOTT.

THE Monsoon was over. For five long months we had lived on the tops and sides of peaks on the Eastern side of the Mayu Range, in country known to the cartographers as "dense mixed jungle". The rains had come and gone, taking with them many of our modest residences. Landslides were amusing to watch from a distance, but unattractive if they included your home and your other shirt.

However, all that was over now, and we were about to start a campaign to end Arakan campaigns. We'd had a month out of the line, and after jungly hills the open and above all, flat, land bordering the Kalapanzin seemed very inviting. We have guarded the famous Tunnels on the road from Maungdaw to Buthedaung throughout the monsoon, and the idea of using the road appealed to us a lot. We knew the country to our East excessively well. Day in, day out, men of the Battalion could have been found all over it. If you knew where to look, that is to say. For patrols move warily, and have a preference for the less obvious routes.

Our transport platoon is a long-suffering body. At one time they owned the smartest and best-maintained collection of vehicles in the Division; or anyway, said they did. Then they had all the bigger vehicles removed, and found themselves with a few jeeps and far too many mules. Now, they were presented with a scratch lot of assorted native sampans and a few old ships' lifeboats and told to get on with it. They evinced no surprise; it is no longer possible to surprise our transport platoon.

But when you come to think of it, it is really rather remarkable. Picture the scene if you informed a baker's van driver in Leeds that his beautiful vehicle now belonged to another and that in future he would deliver the bread with the assistance of a mule of pronounced character. Then, when he had learnt how to handle it, and made it realise that its name was Jane, it was taken away, and he was told he would now deliver his wares on treacherous waterways in a leaky boat. But this is a waste of printer's ink. It is not possible to visualize such a situation, so let us get on with the tale.

After certain preliminary moves, on December 14, 1944, the operations on the Kalapanzin began. We held the gate open, and West African troops flooded through us to Buthedaung and the river. They crossed immediately south of the "town" (by then a few shell-destroyed buildings) and we moved up behind them. The plan was for us to follow them across and then turn south and make a bridgehead for them across a river flowing into the Kalapanzin from the East. Before this could happen, however, we had to receive our boats and part with our mules. The boats had to be lifted in lorries from Maungdaw to Buthedaung over the Mayu Range, put into the water at Buthedaung, loaded and floated down to us.

In the event, the West Africans went a lot quicker than expected and the boats mostly went very quickly under water. So the plan was altered.

My battalion's fleet consisted of 46 sampans and the Arakan Castle. On arrival at Butheduang, all but eight of the sampans were unserviceable, and a number, with their loads, were sunk without trace. So we began to use the British soldier's inexhaustible powers of improvisation from the start.

First, we must mention the ARAKAN CASTLE. This vessel was a Fleming boat. That is to say, on iron ship lifeboat, propelled by heaving back and forth on levers in its centre: a process which causes the screw to revolve. It was not an "issue" boat; we had found it lying derelict in a creek, having been lying there for two years or so neglected by both Japanese and British. Our drivers salvaged her, and made her rusty machinery work. Proudly decorated with the Red and the White Rose, she was our flagship until she sank riddled with bullet holes.

The sampans were, theoretically, propelled by native oars. In fact, when the water was shallow enough, you got out and pushed; or if the tide was favourable, you drifted. When the tide was against you, you got to the nearest bank and tied, up.

We were helped out by two or three assault boats with outboard engines affixed to their sterns. These engines were temperamental and preferred to work in either salt or fresh water, I forget which. As the Kalapanzin is tidal, we had both to deal with, so for half the time the engines protested with the same silent efficiency as a mule. They also exhibited a tendency to fall off into deep water unless closely watched.

Finally, Brigade would allot us Flemings to do troop lifts. These were near relations, legitimate and recorded on several Army Forms, of our sub rosa Arakan Castle. Two-thirds were dumb or unpowered, while one-third were powered with Chrysler engines and manned by Indian personnel of the I.W.T. The theory was that you tied a dumb one to each side of a powered, and the triple Fleming was then able to navigate the tricky waterways under its own power. What we hadn't foreseen was that the I.W.T. personnel would be stokers from coal-burning coasting steamers. They had never seen either petrol engines or the Kalapanzin. But little things like that were nothing to us. Our "muleteers" from South Yorkshire took the boats over and operated them successfully but erratically for the whole Brigade throughout the campaign.

By the time this motley armada had been assembled and persuaded to stay above water, it was time we got a move on. The West Africans were still discussing life and death with the Japanese on the East Bank of the River; and a similar argument was going on on the West bank between part of our Brigade and some other Japanese. So we were told to go down the River itself, and occupy a couple of islands in the middle. At these islands, the Kalapanzin loses its dignity for a while, and forms a figure of eight round the islands until it reforms into one stream at Kwazon. Apparently ashamed of itself, it there changes its name to the Mayu River and flows sedately to the sea.

We had enough boats only to lift one Company at a time. So I chose what I hoped was a fairly unlikely spot and despatched Robin and his Company to it in a pair of triple Flemings. The boats were then to return to the Kin Chaung for my Tactical HQ and as many of another Company as could cram in. The remainder of the Battalion was to march to a narrow part of the river and cross in native craft.

The departures of the first flight at 3 a.m was awe-inspiring. There was a good enough moon, but also a dense mist which limited visibility to about ten yards. Our embarkation point was a mile up the Kin Chaung, a narrow tidal creek which was virtually dry at low water. The six boats were filled at high tide and cast off. Nothing happened. Much blasphemy and pushing got them afloat and they disappeared into the fog. Attempts at turning the two triple-Flemings round were only fifty per cent. successful, and eventually I heard Robin's voice deciding that his craft should go out backwards. And then silence.

The wireless soon began to talk. First, Aubrey the Gunner, was heard saying that two bundles of boats had just drifted silently past him, one going sideways and one going backwards. Was he right in assuming that this was the British doing things the hard way? He was told, among things, that this was so, as he knew full well.

Then Robin came up and said that as he now could see no land at all, he thought he was in the main stream of the Kalapanzin. He could hear the engines of the other half of his Company and was looking for them. In ten minutes he had found them; on a sandbank not recorded on Army maps. He towed them off and proceeded on his way. Finally, just at dawn he reported that he was ashore and the boats were on their way back. The relief was intense, as, although we knew that few, if any, Japs were on the two islands, eighty or ninety men packed tight in non-bullet-proof lifeboats form a target a machine-gunner dreams of.

By now the mist had evaporated under the morning sun, and soon one of the triple-Flemings returned. The drivers reported that the Japs had shelled them en route, but unsuccessfully. The other boats had broken down, but turned up 24 hours later. So I then set sail with my wireless sets and another platoon, and joined Robin on the Northern island after a pleasant and uneventful sail.

Meanwhile, Robin had worked very fast and had inspected the whole island. Not a Jap was on it, and all the parts of interest to us were firmly held. But the remainder of the Battalion was not so well-placed. Their crossing place had been spotted by some Japs to the West and had been shelled. Six men had been wounded, and worse still the native craft had been removed by their owners, who took a dislike to the whole idea. So did the one Company who had got across on to the North-West tip of North Island, for they found themselves stuck in an unexpectedly wide belt of mangrove swamp. The only thing to do, therefore, was to use the one triple-Fleming which was left to us, and ferry everyone across after dark on to a reasonable landing place.

This we did, and by midnight the whole Battalion, except for the two-thirds of one Company billed to move on the boats which had broken down, were disposed on North Island. At dawn, therefore, we began to see about South Island, which could be, in part, inspected across the turbulent waters at the centre of the figure of eight.

Robin again led the way in an unopposed landing, and then the triple-Fleming had to sail back to our starting point for Brigade use. My object, though, was to reach Kwazon, if possible in advance of the news of our approach. However, I couldn't very well send two Platoons forward all by themselves, with no other troops on South Island and out of range of all guns. So what to do? Aubrey the Gunner came to the rescue, with one sampan powered with an outboard engine. This tiny craft, with an assault that tied to it, ferried the whole Battalion less one Company (the involuntary laggards already mentioned, who

had now reached North Island) across the gap—a feat which made Gunner Green, the boatman, our friend for life. By noon, therefore, Robin was able to reach Kwazon, to learn that the last Japs had left by boat four hours previously; maddening.

We were now some ten miles ahead of anybody else on the Kalapanzin, and we settled down to hold what we had got, and to make ourselves as big a nuisance to the Japanese as we could. Aircraft brought and dropped on us mail, supplies and Xmas fare, which we enjoyed in and around Kwazon. The village itself showed few signs of war, chiefly because none of our guns could reach it. The villagers were more than friendly, and for the first time since I could remember I slept in a house—complete with floor, roof and walls and even a table and chair. I also acquired the services of a very small boy called Habibullah as general cleaner-up.

Aubrey produced a 2-pdr. anti-tank gun, despite the fact that his battery was officially equipped with 25 pdr. field guns. This weapon, coupled with some of our tracer-firing Brens, was established at the southern tip of the island, where the streams joined to form the Mayu River. The combined team did good execution on Jap boats trying to float down after dark, and we collected a quantity of stores from sunken craft. Japanese picture postcards were acquired by most of the Battalion, and mine at least reached Home through normal postal channels. Several bales of clothing were also welcome; these we gave to the villagers, as they had received no cloth throughout the Japanese occupation.

Habibullah, in his official capacity, we rigged up in some Japanese shorts and a small monsoon cape; on him they were full length trousers and a kneelength cloak. Attached to him also was a label saying that the clothes were his, a gift from the British and not from the Japanese. Otherwise he might have got into trouble as a "collaborationist": he'd collaborate with anyone for a cigarette.

It was here that we started to collect prisoners. From various sources came news of Japs, and we pursued them all. My only complaint was the excessively bloodthirsty attitude of the raiding parties. Three Japs on a telephone post across the river, I thought, might produce a prisoner; but the party was all over in about ten seconds, with the Japs full of bullets, bits of grenade and their straw hut on fire. The raiders only just managed to get the telephone to show they had been there.

The prisoners we got varied as much as any other collection of men. The first fellow we picked up was suffering badly from dysentery, but our doctor fixed him up temporarily. He, like all others I've met, talked readily enough once he began to be treated properly. I usually started by using a polite form of Japanese, reverting to a more abrupt colloquial form once the conversation was going smoothly. Surprise was the prisoners' chief reaction: surprise at not being already killed, at the good treatment they received, at finding anyone who could talk their own tongue, and finally at not being ceremonially executed. Only one asked me to shoot him; whether this was due to acute stomach ache which was afflicting him or the well-publicized Bushido spirit, I cannot say. Probably the former, I think.

Another man was a Medical Sergeant, brought in bound hand and foot by villagers. He was picked up wandering lost by the banks of a stream. He was most philosophical about it all, and seemed glad to have an excuse for walking no more. (His figure was not that of an enthusiastic pedestrian). He spoke a little English, and knew foreigners sufficiently well not to be surprised at the

treatment he received. We chatted amicably of this and that as he came into my H.Q. in a boat, chiefly of the chances of settling down in Brazil after the war. It seemed a curious conversation to be taking place on a Burmese river in wartime; but the Japanese prisoner had an uncle in Brazil, and my Second-in-Command had spent several years there, so it was a subject of interest to both of them.

Time marched on, and after we had opened the Eastern side of the figure of eight waterway, the Brigade's tail caught up with us and we could consider the next hop. At first it was to be a spot 20 miles down the Mayu River on the West bank. Then it was changed to Kudaung Island on the East side, the last stop before Akyab. For this performance we had enough Fleming boats to lift the whole Battalion, and two real vessels, M. Ls. of the Royal Navy, which had rounded Foul Point and sailed up to join us.

Twenty-three miles was a bit too much to ask of the Fleming Fleet all in one hop, so we stopped at Htizwe for dinner. Then, as night fell, we moved out silently in to the main stream, and moved quickly past the deserted town of Rathedaung (it really was deserted. I had looked in, somewhat nervously, in M. L. 1275 at 6 p.m. to see. I think the only reason why the skipper went was because he saw an opportunity to hang up a White Ensign there). Then three triple-Flemings touched down simultaneously at different points, and in silence two columns converged in the moonlight on the main village, while the third headed for the best landing point and jetty from the landward side.

Luck was with us again, for my floating reserve ceased to float quite early in the proceedings. Half of it sat on a mudbank, and the other half spent the remainder of the night trying to tow it off. Once we were ashore we searched vigorously for Japs, but found only one straggler, whom we took prisoner. Then we disposed ourselves all over the island and demanded imperiously to be allowed to capture Akyab. Nobody knew how many Japs were on it, least of all ourselves. But we did know that a Combined Operation had been laid on for its capture, involving several thousand troops and apparently the whole Navy and Air Force. It seemed a good idea to get there first. However, it was somewhat naturally ruled out of court. But I still think we got the last laugh, because as is now known there was not a Jap on Akyab Island and the invasion was just an unopposed practice landing.

The next move for us was to sail to Ponnagyon across country, if the term can be used of a boat journey. By devious chaungs we moved, preceded by M.L. 1275. Behind her came that nightmare stream of triple-Flemings, horribly vulnerable to anyone with a firearm on the banks. The rivers were often only fifty feet wide but luckily mangrove-bordered. It was the first time I'd ever viewed mangrove favourably. For half the journey all went well, and I was beginning to think we were fated never to meet a Jap.

But as M. L. 1275 came to a T-junction, we met the foe, and a curious engagement took place. The Flemings were halted, and M. L. 1275 made a great deal of noise with its guns. The Japs retired from the bank, and tried to hit us with mortar fire. As we couldn't manœuvre in the narrow stream, this was more fun for the Japs than for us. They failed to hit us, though one near miss caused the vessel damage more spectacular than dangerous. The Navy were delighted as they proposed to shoot no ordinary line to other unwarlike vessels in their company. We had one man wounded in the head, very slightly. His name was, appropriately, Private Nutt,

However, something had to be done about it, so we assaulted and cleared the banks, and chased the Japs a mile or two inland. Brigade ordered us to halt then, as an army in Fleming boats is most unsuited for fighting battles. After three days we moved on through cleared country and came out at Ponnagyon on the Kaladan River, where we joined up with another Battalion.

The Japs were now known to be out of Akyab and trying to move East and South. Parties were still known to be west of the Kaladan River, and we were told to go upstream to Yongon and present anyone getting across there. Off we went but it was several days before boats were available to lift more than three of my Companies. In the meantime we chased Japs and rumours of Japs with great vigour and varying success, until the night of January 11-12th.

That evening my Headquarters Company came up to join us, and arrived at dusk. Digging in began as usual, but there was not much time to site positions really well. In fact, our layout was not one which conformed either to the books or to our own improved (?) versions thereof. Our indignation was, therefore, great when we were set upon at midnight by apparently several million enthusiastic Japs.

Night to me in a strange Burmese village is a place ill-suited for the conduct of a cunning defence. In fact, all you can do is sit tight, hope for the best, and shoot anything you see moving. This we did. My Second-in-Command shot a cow, but I shot nothing. The remainder of the men did better, and only a few Japs straggled past the village. We eventually counted 24 bodies, and got four prisoners, three of whom died of their wounds later.

A few minutes later another battle broke out on the river bank, where we had one platoon and the crews of those Fleming boats which were still with us. The Arakan Castle was among them. Some further Japs, plus the remains of the party who had bumped into us, had arrived there to meet some boats to take them across the river. And the boats did arrive; big, armoured ones, with machine guns and searchlights.

A most spirited fight broke out, for our Flemings blocked all but a few yards of the "beach." The searchlights were a grave nuisance and had to be be put out. A Bren gunner did this, and from the noises caused he must have put several Japs out, too. One Jap landing craft did manage to beach and lower its ramp. There was an immediate rush of Japs on board, up went the ramp, and in went several British grenades. Further satisfying noises of pain and displeasure came from inside the vessel as she departed and the others didn't come in. As a matter of fact, there weren't many more intending passengers; only two, so far as we could discover next morning, and they grenaded themselves before we could catch them.

Our own losses were twelve killed and eighteen wounded in varying degrees. It is difficult to estimate what the Japs lost: in fact we don't do it. However, 24 bodies counted and four P. W., point to quite a sizeable number. And it showed that the ordinary British soldier could beat the Jap, for, from our point of view, all there was to do was to sit tight in the dark. Any Napoleonic plan I might have had (I hadn't one incidentally) could never have worked, as anyone moving was immediately the target of both British and Japanese bullets. The Japs had medium machine guns with them too: I know, because we got five machine guns in all, including two mediums.

Our river war was now nearly over; after we had buried our own and the enemy dead, and had marked suitably the fenced off graves, we moved back to Akyab. We left behind several Fleming boats, including the ARAKAN CASTLE. She lay in shallow water full of bullet holes. As the tide rose, so did the water level inside her. So did some of the kit she contained. My own was under some ammunition, and remained below water whatever the state of the tide.

Akyab was a deserted city, except for increasing numbers of the Army, the Navy and the Air Force. This is no place to describe it, except to say that it must have been a pleasant place before the war. Presumably it will be a pleasant place again some time, and if this is the case, let those who enjoy it note the War Memorial we erected near the Church, and remember those whose sacrifices made their enjoyment possible.

From beginning to end of our year in Arakan (and our river riding lasted only a month), we lost 50 officers and men. We were, I think, lucky. Other Battalions lost more, and the various Arakan Campaigns have cost many hundreds of British, Indian and West African lives. Thank goodness the last one is now over; and it is pleasant to feel that we helped in some measure to end what Headquarters termed the "running sore of the Arakan Front."

Posthumous George Cross for F. F. Rifleman.

Rushing forward to dispose of a live grenade, Naik Kirpa Ram, 8th Frontier Force Rifles, a Dogra Rajput of Bhapral village, Bilaspur State, Simla Hills, took the full force of the explosion and saved the lives of his comrades. He has been posthumously awarded the George Cross—the fifth to be won by the Indian Army.

Naik Kirpa Ram was commanding a section during a field firing exercise at Thondebhavi, near Bangalore. He was lying close to a sepoy who was firing grenades from a discharger cup, the rest of his section being in position beside him. The third grenade fired fell short, landing only eight yards in front of the section position.

Naik Kirpa Ram saw at a glance that if it exploded many of his section would be killed or wounded. Without a moment's hesitation he dashed forward shouting to his section: "Get back and take cover."

He then picked up the grenade but before he could throw it to a place of safety, it exploded. The main force of the explosion was taken by his body and he died of wounds shortly afterwards.

A TECHNICAL INTELLIGENCE OFFICER IN BURMA

BY CAPTAIN R. H. HEARN.

HEN the Japanese war started we knew nothing about their equipment. They had guarded their secrets well. In the first year we made no headway in gaining information about their weapons of war. Descriptions started coming in at first from the Australians and Americans following their counterattacks in the S. W. Pacific, but although we received full information about the equipment captured, the gilt was missing from the gingerbread. We could not examine and strip the equipment ourselves.

As the tide turned and the 14th Army advanced, large quantities of equipment of all types fell into our hands. It was a veritable windfall, and a mass of information came our way. It was published in pamphlets for forward troops, helping them to make immediate use of captured equipment. Many items were sent back to Indian training centres; and specimens were sent to England to help in the training of troops likely to come out East after the end of the European campaign.

In Europe British and American technical intelligence teams worked in close liaison with forward troops and inspected new types of enemy equipment. German equipment found to be in advance of ours was flown back to England for examination, and experts copied or improved it for our own use.

The same principle was followed in Burma, only on a much smaller scale, with the marked difference that whereas in Europe equipment could be flown back to England in a few hours, in Burma vast distances had to be covered. Heavy equipment, such as tanks and guns, often had to be sent back hundreds of miles under difficult conditions before reaching railhead. Air evacuation was used as far as possible, but 'planes were mainly used for wounded and mail, and in any case aircraft available were limited.

In the first phase of the Burma campaign two Technical Intelligence Officers operated, one in Arakan and the other in Central Burma. Early in 1944, when we began regaining the initiative, these two officers dealt with all new types of Japanese equipment, examined them, wrote technical field reports on them, photographed them and despatched them to Inspectorates in India.

Their work was divided into three categories. First, and most important, to assist the forward troops. In Burma supplies had to be carried over bad roads and through monsoon weather; delay was unavoidable, and sometimes important supplies were lost. They were often short, too. The invasion of Europe was first priority then. It resulted in shortage of material for Burma—a fact understood by the troops but not always appreciated.

Thus every gun, tank, tractor, vehicle, shell, grenade or other equipment had to be utilised. Many times battalions were saved from serious setbacks by using newly-captured equipment, more especially the Japanese light and medium machine guns. The Japanese grenade discharger became a popular weapon with our troops; it was extremely accurate, simple to work, and easy to carry. Many types of weapons captured were copies of our own or American types, but occasionally new types were found, and it was then that the Technical Intelligence Officer was called in.

At first our troops were apprehensive of using this captured material. Everything "Made in Japan" was regarded with mistrust and thought to be useless and out of date. I suppose the thought originated from pre-war days, when Japanese articles were cheap and disintegrated at the slightest touch.

But Japanese peacetime goods and their weapons of war were very different. I do not pretend that the latter were up to British or American standards, but their main equipment was sound and dependable. I'm always hearing the argument of the Japanese hand grenade. To use this crude weapon you have to strike its head against a hard surface, such as the rim of a steel helmet, and then throw the grenade very quickly; if you hold on too long, you're liable to have your fingers burned by the flash escaping from the vent hole by the fuse; moreover, the grenade is liable to explode any time between two and seven seconds. Obviously, it is best to leave them alone, or use them in a counter role as a booby trap. If curiosity killed the cat, I always think the Jap must have very strong feline instincts.

Our second role was to write up detailed reports on newly captured equipment, and photograph each item. These field reports kept all theatres of operations in the picture. Direct liaison was maintained with the American and Australian technical teams, and thus up-to-date data on equipment captured in Okinawa, New Guinea or Burma was available. An unknown sight of a gun might be captured in Burma; without full details it would be impossible to forward a report, but by cross checking it might be found that the other half may have been picked up by the Americans or Australians. Thus we would be able to piece together a full description.

Having been inspected and photographed, the part would be sent to one of the Inspectorates in India for detailed examination. In the case of guns "firing" trials would be conducted; tanks and tractors would be made. "runners." Each item would be stripped and examined. Small pieces captured would be sent by air; others by road to Dimapur and on by rail to Calcutta. The farther we advanced, the longer and more difficult became the lines of evacuation.

For equipment of extra importance we had to evacuate it ourselves. The first 47 mm. anti-tank gun captured in the Arakan in early 1944 was towed 150 miles to Chittagong at an average speed of 30 m.p.h., caught the boat with five minutes to spare, and was delivered to the Inspectorate in India within four days of its capture. Perhaps the best record was with a German 37 mm. P. A. K. anti-tank gun, captured south of Kalemyo. An immediate signal was received saying it had to be evacuated to Calcutta on the highest priority. It was hitched to the back of a jeep, towed 300 odd miles to Dimapur within 12 hours (which included time spent in retrieving a wheel of the gun, which fell off every 50 miles), and sent post-haste on to Calcutta.

"Booby traps" are another part of the technical officer's job. I was in Burma from early 1944 to late 1945 and never came across a booby trap of any description. An American team which worked with me for eight months never saw one either. We were fortunate, for booby traps were laid by the Japanese, mainly on the more "sordid" principle, such as tying grenades to our dead or wounded. Japs did not employ them on such a large or crafty scale as Germans.

The pastime of booby-trapping houses and likely souvenirs, such as placing a grenade under a steel helmet, was done by the Japanese, but only on a small scale. I never heard of a booby trap being found in a dump, the main reason, I think, being that they had not the time, for from Kohima they were continually on the run, were short of ammunition, and were a beaten and dejected army.

Sometimes a technical officer has to fill a tactical role. Japanese defence positions had to be reported on from our point of view. Two outstanding instances were at Ayadaw and Monywa, both elaborate and carefully constructed defences. In both a company of men adequately stocked with food and ammunition could have held out for many weeks.

How does a technical officer work in with the forward troops? He starts off by being attached to Corps H. Q., and through Intelligence is able to keep in close touch with Divisions and Brigades, as well as maintaining close touch with R.A. Signals and R.E.M.E. branches; the latter would sometimes obtain direct information about newly-captured equipment. Ordnance depots in the rear often had new items of Japanese equipment which had by-passed the normal channels.

In September, 1944 the first complete technical team was attached to 33 Corps, remaining with it from Imphal to Mandalay and on to Rangoon. A further team was attached to 4 Corps later. They consisted of a British and an American technical officer, photographer and four American technical sergeants. As the advance continued, new equipment came into our hands. An unusually interesting piece was the 32 cm. mortar weighing 900 lbs. and firing a bomb weighing about 700 lbs. From a dump in the Fort at Mandalay enough new items were recovered to fill an American Commando aeroplane, which carried about 10,000 lbs.

In Shwebo one dead Jap was found. Every house, basha, temple was searched but the place had been systematically cleaned out. The Japanese took great trouble to camouflage and hide their more important dumps, often placing them in the middle of thick jungle, occasionally four or five miles from a main road. They were virtually invisible from the air, and even on the ground were no easy job to find.

We were with "V" Force, and in the lull before the main attack across the Chindwin there was continual warfare in No Man's Land. The Japs had established large dump locations in these areas, many of which they could have guarded better. The biggest was at Settaw, a small village across the Chindwin. Reports said that the dump stretched over an area of five miles, and contained every type of equipment. The opportunity was too good to miss. Three days' march over mountains brought us to "V" Force H.Q. Late on the night of our arrival a Burman rushed into the camp and told us a Jap party with transport and 400 coolies were approaching the Settaw dump to salvage what they could.

Early next morning we set out, crossed the Chindwin, and reached the outskirts of the dump about midday. A wide track led east from the village, and at 50-yard intervals were large wooden bashas, each stacked with equipment of all sorts, mostly ammunition and signal stores. Two miles up the track and, going round a sharp bend, we were confronted by a party of Japanese. Both they and us were equally surprised and dived into the jungle, which suddenly became alive with chattering monkeys. They leaped from tree to tree, making a lot of noise. Soon we were mistaking Japs for monkeys and monkeys for Japs.

During this rather uncomfortable lull the American officer with a band of coolies was evacating back some of the more interesting items from the bashas. Withdrawing, weuset fire to the bashas, and crossed back over the Chindwin.

Have you ever thought of the reasons bombers were able to destroy just the very places in Japan where we knew their armaments were being made? Apart from our espionage service there, the main source was handed to us by the Japs themselves. Attached to almost every item of their equipment was a name plate, giving an unbelievable amount of information, date of manufacture, arsenal at which it was made, full name and type and number of the item. Every name-plate was removed and flown direct to Washington, where it enabled the authorities to pinpoint specific targets in Japan.

These name-plates were also useful in building up the approximate picture of the enemy strength. In March we might capture a medium tank numbered 53; in May two further tanks might be knocked out numbered 47 and 49. Knowing the complement of tanks in a Japanese tank regiment, in time the jig-saw puzzle would slowly complete itself.

I wonder how much the Japanese were able to squeeze information from us? How often did Private Jones go into battle with his shoulder flashes stuffed into his trouser pockets? He'd taken them off, it is true, but he wasn't going to leave them behind for Private Brown to take them. How often did Captain Smith go into action with a picture of his girl friend tucked away in his breast-pocket in an envelope with his unit's name on it? Numerous instances occurred of photographs, letters, envelopes being removed from dead Japanese which had originally been removed by them from our own killed or prisoners of war.

The Japanese really were unbelievably careless. Coveted Japanese flags were nearly always inscribed with the unit's and Commanding Officer's name; sometimes its battle honours would be listed as well. Almost every Jap carried a wallet stuffed with photographs, letters, and other small items of "intelligence" interest. Japanese prisoners were worth their weight in gold. Security was not their strong point. The Jap Higher Command had been confident that no Jap would fall into our hands alive; his duty was to commit hari kari. But there were black sheep, and as a result our Japanese order of battle in Burma was always very comprehensive.

Technical intelligence officers in the forward areas are regarded with reserve and suspicion, however tactful they may be. Many troops, especially Indians, were unaware that a "Technical Intelligence" branch existed. Officers, being equally ignorant themselves, were generally to blame. There is always a natural instinct with a fighting man, who, having killed his foe and risked his life in doing so, feels that what he has captured is his, and the motto "Help

Intelligence to help you" is soon forgotten.

We found it best to adopt the principle that the customer is always right until he is tactfully persuaded to think otherwise. Working with the forward troops, our teams were able to prevent a lot of pilfering, though it had the disadvantage of being tied to only one area at a time. It was, however, fairly easy to appreciate the situation as to where to concentrate our forces; we were nearly caught over the Mandalay show, but just boarded the last ferry across the Irrawaddy and were able to be with the 19th Division when they captured the city.

Technical intelligence officers are now investigating arsenals and dumps in S. E. Asia, especially Malaya. Americans and Australians are combing Japan and the S. W. Pacific. A complete dossier will be able to be compiled and Japanese secrets laid bare, and it will be interesting to see if Japan was able to keep ahead of us. Many startling discoveries have been made and many more have yet to come to light, disproving the ever popular myth that the Japanese spent their time copying other nations, and had little or no inventive capacity of their own.

"POCO POCO ITALIANO"

BY LIEUT.-COLONEL H. B. HUDSON.

THIS isn't about war at all; it is about peace, perfect peace. I am morally debarred from writing anything about the war in Italy for two very good reasons. The important one is that I wasn't there very long before it was all over. In any case the history of the 10th Indian Division has already been written; Stevenson, of the Historical Section, spent most of the summer doing that, and I am looking forward to reading it.† I am sure that before long the Journal will be publishing one of those excellent articles by Colonel G. T. Wheeler, who commanded the recce Regiment.* No, I am not going to write about war at all. My story starts after "VE" day. I feel that this peaceful chapter of the Indian Army's history should be recorded because it was a very interesting and I think a very important one. The editorial "we" and "us" I use refer to my own battalion and the division as a whole.

We came to Trecenta a few days before the end. We had been sent to guard a German ordnance dump, which contained the most remarkable collection of stores, some of which we found very useful. We occupied the provincial agricultural depot, which made very good barracks, and thought ourselves very lucky indeed after the discomfort of Appenine and Po valley farmsteads. Trecenta was a small market town which, when we arrived, appeared to be celebrating the withdrawal of the German army very seriously. There was some economic and administrative confusion, but this did not stop the dances in the teatro. Our officers were billeted throughout the town and we had part of the depot manager's

house for the mess. It was all very pleasant.

Then the peace was declared and Trecenta stepped up its celebrations to fever pitch. As we were on our own (how jealously we guarded our privacy!) we had a special victory parade, when the G. O. C. took the salute in the piazza. We staged this on a Sunday evening, which was a popular time for the citizens. As I walked back to the mess with the G. O. C. I gracefully acknowledged the greetings of the local beauties, most of whom I now knew by name. It was all very triumphal, but the climax of the proceedings was a dinner and dance given by us to the partisans and their ladies. We held this in the courtyard of the manager's house. It was a great success and the prettiest things were said by both parties. After that I was rather anxious to leave Trecenta. The pace was getting too fast.

The troops had a good rest here. It was a good place to start becoming a peace-time battalion again. We mounted guard in the *piazza* every day and started wiping off some of the stains of battle. There was much cleaning of brass and polishing of bayonets. The V. C. Os discovered that there was a curious creature called "V. C. O. of the Day" who had to make numerous appearances and even mount the guard in public. There was very good bathing in a canal, and the *dhobis* started their destruction of clothing on the stones by the bridge, where the washerwomen joined in the general conversation. There

^{*} There is one entitled "The Last Year in Italy" by Colonel Wheeler in this issue.— Ed., U. S. I. "Journal."

†The title is "Teheran to Trieste."

was a conscious spit and polish complex, and drill movements which had become vague memories of the unreal past were practised with great enthusiasm. Relations with the local population were excellent. Officers even dined out. The dances in the teatro continued. It was really time we moved on.

The object of the next exercise was something to do with Tito. Towards the end of May we moved one hundred and seventy miles through Rovigo, Padua, Mestre and across the Piave to the far side of the Isonzo. Most of the division was in the low-lying country near Gorizia. My battalion went up on to the Carso, that rocky, barren jumble of hills which was the scene of the battles of the Isonzo in the last war. Like nomads from Central Asia arriving in India two thousand years ago we selected our future home, a village on the slopes of Monte San Michele called San Martino del Carso. There was very little shade, the houses were poor and quite unsuitable for billeting, and there was only just enough water for the inhabitants.

There were advantages, one being that we could bivouac in clean fields. Our drinking water had to be brought from the water point some miles away and the men bathed in the Isonzo at the bottom of the hill, a longish walk. The mess was first of all in a house, but flies and smell drove it into tents. The men's bivouac tents were greatly improved by building walls three feet high and pitching the tent above the wall. There was enough stone on the carso to pave the Sahara. Companies built open-air dining halls, schools and offices. I had a sangar built for myself, over which was stretched a large tarpaulin. I lived in this when it wasn't too hot, and it got very hot indeed; there were no trees. There were one or two very heavy thunder-storms, but most of the time the weather was set fair and the sun beat down on the rock.

In many ways the village was transformed. We had our gunners there too, and very good company they were. Between us we tidied up the hillsides and the village streets. Being poor land, bare and waterless, it could give but little return to the hardworking peasants. There were pine woods near, higher up Monte San Michele, but there was little ground for crops anywhere. They were a dour, rather ugly collection of people, quite unlike the Italian peasants we had met elsewhere. The reason was that they were not Italians at all. Most of them spoke Slovene and many had Slovene names. There appeared to be no one appointed as spokesman and the small community seemed to live in an atmosphere of poverty and dirt.

I don't think the men liked the San Martinians much. I was sorry for them. It isn't much fun living on the Italo-Jugoslav border trying to make a living out of a burnt-up pile of stones. We stayed two and a half months on the Carso and I think that both the officers and men enjoyed it very much; but the pleasures were not to be found in San Martino. It so happens that the Carso is on the edge of a most fascinating part of Italy, that region which is called Friuli. This is the country between the Adriatic and the Carnic and Julian Alps, an area of fishing villages, ports, flat rich farmland, foothills covered with pinewoods and mountains rising to ten thousand feet above sea level. It is a land of infinite variety; even the people are varied, Italian, Slovene and Tyrolean.

Trieste is an Italian city. Gorizia is largely Slovene. Monfalcone was a growing port before the war. Inland, on the road to Tarvisio through the Tagliamento gap, is Udine, an ancient Italian city with fine buildings and magnificent views towards the Alps. There is a small town called Gradisca which members of the 10th Indian and 56th Divisions will always remember. The opera company from the Scala came there for two months and staged their

performances in an open air theatre on the banks of the Isonzo. Then there were all the villages on the plain where troops were billeted, Romans, Johannis, Sagrado, Cormons and Lucinico: our camps went up the Vipacco valley into purely Slovene country and across the Carso to Comeno and San Daniele.

There was sailing at the Yacht Club at Monfalcone, the fleet to visit at Trieste and there was Austria for the adventurous. Austria was perfect at that time of year. There was a route up the Isonzo valley through Caporetto, over the Predil pass and down into Tarvisio. After crossing the border the road went through Arnoldstein, Villach and Klagenfurt, following the shore of the Worthersee for the last fifteen miles into Klagenfurt. The lake was surrounded by wooded hills and in the background were the Alps. There can be no greener grass than that in Austria. Before I saw them for myself I had always imagined that the inhabitants of the Tyrol wore leather shorts, green hats and elaborate braces for tourists only. They do not; they wear them any day of the week.

So the summer went on. At the end of July the division staged the Monocle on the banks of the Vipacco. The Monocle was flippantly so-called because it was considered to be a one-eyed spectacle. It was in fact a very fine piece of production and stage management. The stage was on the banks of the river which flowed between it and the spectators. The performance started with searchlights trained on an Indian village, built two hundred yards beyond the river. There was a honking of horns and a bus marked "Chakwal-Jhelum" came down the village street, crammed with passengers and luggage. The night's entertainment ended with a noisy and extravagant expenditure of pyrotechnics (by Wehrinacht, in liquidation).

Then we moved a few miles down on to the plain to a village ten miles from Udine. Life really started there. The men were all in houses and the officers' mess was in the Villa de Brandis, with the Count, Countess and Contessina all complete. I myself had coronets all over my bedroom, and the garden was delightful. We had a band now, and were able to dine to sweet music under the cedars. We gave concerts in the villages and became part of the country-side. From my window there was a view of miles of foothills and Alps. It was as good a life as anyone could wish for. The V. C. Os. had a fine mess; the havildars had a club. There was a Rest Camp in Gorizia to which fifteen men at a time went on leave.

Everyone got to know the villagers very well and I used to see some of the V.C.Os. dining with them as I walked down the street of an evening. My orderly was on the best of terms with the de Brandis servants, who tried to teach him how to mend socks. He said he really wanted to learn Italian properly, and he probably did. But this lotus eating was too good to last and we began to hear rumours, which usually originated in Rome or Florence, that we would move to Milan in September. Indeed orders came for such an uprooting and we decided to ask some of the notables to dinner before we left. The Count had been extremely hospitable. On the night of the Japanese surrender he had produced a bottle of wine dated 1790 and signed by his great-great-grandfather. When the G. O. C. came to see us our host thought 1832 would be worth trying. On the night of the dinner party he presented us with a dozen bottles of Tocai, the product of his own vineyards.

The dinner was a great success. The band played in the garden (we dined inside, it was getting cold) and the villagers came to watch the fun. After dinner we danced in the baronial hall and parted with professions of lifelong friendship. Indeed they were a very charming collection of people and I shall be

very sorry if I never see San Giovanni again. Judging by the number of officers who slipped over there from the neighbourhood of Milan (which is no Sabbath day's journey) I am not alone in my sentiments. But that remains to be seen.

The next move was by rail. We went through Verona, past Lake Garda to Brecia, skirted Milan and detrained at Pavia. Our new quarters were near Voghera, in five different places and NOT very attractive. We found the people unfriendly and some of the accommodation (particularly my bedroom) was poor. Battalion H.Q. was in a palazzo, and what a palazzo! It had more frescoes, more red plush, more painted ceilings and gilt furniture than any other palazzo in Italy. There were grand pianos, a ball room, a marble staircase and a clock in the tower which chimed the wrong hours; but there were no bathrooms which worked properly, and the draughts were arctic. Something had to be done about the hostility of the natives so I called a meeting of all sindacos, priests and other worthies. After an impassioned speech I again shook hands with all the delegates and lasting friendship was proclaimed, and I must say they kept their word. We had no more murmurings and the scurrilous rumours about Indian troops which had been spread were heard no more.

This upper Po valley country is not particularly interesting. Milan is a fine city and Pavia is very attractive. On a clear day one can just see the Swiss Alps. But I went further afield and spent five days on the Riviera, between Genoa and Monte Carlo, which is beyond the scope of this article. It was superb. The colouring along that coast is so vivid that it is almost vulgar. A month later the division moved down to Taranto and awaited the ships which were to take us back to India. We had finished our Cook's tour of northern Italy and had now to shake off many bad habits. No more jeeps speeding towards the club at Voghera; no more vino under the cedars; no more open air dances on the banks of the Isonzo. Nothing like that about the future; we must get used to fifteen vehicles and forty-one mules. Any future "swanning" (if you will excuse an Eighth Army expression)* would have to be done in a tonga or on a bicycle.

Those of you who have read as far as this will wonder why I think this story is so important. The reason is because of the effect these months had upon the Indian soldier. He had already got to know quite a lot about Egypt, Palestine, Cyprus and Italy, but this had all been in time of war, when there was not quite so much freedom and certainly not so much time to look round and let impressions sink in. Now his life was freer and his mind easier; he could enjoy his surroundings and could afford to be generous to the citizens he had liberated.

During his life overseas the Indian soldier had learnt a great deal. He had seen the ships which bind the Empire together across the seas he had been unable to imagine before. He had assimilated the spirit of the Eighth Army; he was proud of being a Sikh, a P.M., a Garhwali or a Mahratta but he was just as proud of belonging to the Indian Army and he knew that he was a good soldier. He developed very shrewd powers of observation and noted the good and bad points of other nationalities. He had plenty of opportunity of doing this as he lived in daily contact with Italians and fought alongside or met in the canteen British, Poles, Greeks, Canadians, Americans and South Africans.

He came to know many Italian cities, he learnt basic Italian and was very popular with Italians. He went across the Alps to Austria. Wherever

^{* &}quot;To swan" is to travel (usually by jeep) as if on duty, whereas the real object is to see the countryside.

he was billeted he became part of the family, sitting in the kitchen in the evening talking to Mario, Gilda and the bambino. He discovered that fundamentally there isn't much difference between the peasants of Friuli and those of the Punjab or Bombay. I think his mind developed enormously, particularly in the way he regarded women, and I think that this will have a very great effect upon India as a whole, for it is the most insular country in the world and such opportunities of mass contact with other civilizations are rare.

These months of reconstruction after the war was won enabled the sepoy to think. I use sepoy as a generic term, I mean all Indian ranks. They will be better citizens for this thought, and although they were delighted to get back to their homes and very grateful for the reception they were given at Bombay they are, I am sure, conscious of having a far wider outlook than when they left India. Whether some of the habits they have learnt are good or bad I shall not discuss here. There are many bottles of Brylcreem in their haversacks; there are spoons and forks and mugs, cigarette cases and pictures of cinema stars. There is also a taste for beer and wine. But there is also a great understanding of the value of comradeship and the meaning of discipline. On the whole I think they have benefited considerably. And of course there are always those letters from Trecenta and San Giovanni ending with "tanti tanti saluti e presto ritorno."

The Nuremberg Trial

- "A unique feature of the trial of German war criminals at Nuremberg is that in the Court room, on the prisoner's left, is a small enclosure containing ten or a dozen translators. Four languages are needed for the proceedings—English, German, French and Russian—and by a miracle rather like that of Pentecost, any man in the court room—Judge, prisoner, journalist, general public—can hear in his own language what is being spoken in some other.
- "It looks strange at first to see every person present, except the guards, with earphones on his head. They are fitted to every seat, together with a dial on which you turn a pointer to whatever language you need.
- "The miracle is performed by the translators, who, as a speech is being made, or evidence given, speak the translation in to microphones, each of which is connected with every seat in the court. The device was first practised at Geneva, and at Nurembreg it has its defects, not technical defects, but some inadequacy on the part of some translators. As I listened to a dark young woman, whose native tongue was certainly not English, giving a hesitant and obviously summarised English rendering of German evidence, I could not but be conscious that both Judges and prosecuting counsel were, like the rest of us, losing a great deal."—Mr. Wilson Harris, in "The Spectator."

A "UNITED SERVICES COLLEGE"

BY MAJOR T. A. SHURLOCK.

CO-ORDINATION of the Fighting Services is a problem which must be solved if Navy, Army and Air Force are to achieve next time (if there is a next time, and we are not given a chance to get a second wind) their maximum combined efficiency as soon as possible after the opening of hostilities. Let us view the problem in all its aspects.

The Royal Navy has for centuries been the one "sure shield" of the British Empire and its parent island. In time of war its essential tasks are to protect the British Isles from invasion, ensure free communications over world trade routes, cut the routes which carry food and munitions to our enemies, and cover the safe passage overseas of our armies. Before the R.A.F. become a separate service in 1918, success to British arms had been due to a judicious combination of sea and land power.

The R.A.F. has now completed what must now be regarded as a trinity of Services—three in one and one in three. In this way must the Navy, Army, and Air Force be considered if the co-operation and co-ordination of the three Fighting Services are to be the key to our future strategy.

Although by tradition and necessity the German Army was the most important arm of their Fighting Services, the Germans regarded the integration of all three services as essential. They referred to them as the Wehrmacht. An illustration of this was that Kesserling—an Air Force officer—commanded the German forces in Italy and the Balkans.

In the late war, with soldiers serving at sea as Maritime Artillery, or as airmen in Army Co-operation Squadrons, with the R.A.F. Regiment serving as infantry, and with sailors as pilots in the Fleet Air Arm or on land in combined operations, real understanding of the characteristics, powers, and limitations of all three Services became of increasing importance; their inter-dependence cannot be over-estimated.

The last century witnessed the end of the period when wars were fought between professional armies and navies. In the early part of World War I the unrestricted submarine warfare waged by Germany in an attempt to starve out Great Britain affected increasingly the normal life of the ordinary man. Other factors affected the lives of non-combatants in World War II, and it is clear that modern war embraces all the resources of national life and economy.

Rockets, air-borne armies, bigger equipment-transporting aeroplanes imply that the British Isles can no longer rest behind that "sure shield" of the Navy or under the screen of a powerful Air Force. A larger Army than we had before the war may be needed; conscription may be retained. And in future the peace-time officer will be required to train men drawn from every walk of life.

Thus if the three Services are to be regarded as one, if "limited" war is a thing of the past, if conscription has come to stay, then the education of officer candidates in the Fighting Services must be carefully reviewed. It is desirable that a boy be imbued with an inter-Service attitude of mind and outlook

from the day he leaves school and makes up his mind to enter one of the Services. If service in the Forces be compulsory, the permanent officer will be required to train militiamen; he must have the understanding mind of the man of the world; be a good mixer. He must have an intelligence which is not limited, and an horizon unrestricted by a parochial outlook.

Dartmouth, Sandhurst, Woolwich and Cranwell provided suitable instruction in the past. To-day they do not give the liberal education required. There should be established either at Oxford or Cambridge a college which might be called "The King's Services College", "The Imperial Services College", or perhaps "The United Services College". It should be under the dual control of the University and the Civil Service Commissioners, with representatives from the Admiralty, Army Council, and Air Council, and organised on the same lines as an ordinary college of the University, but reserved for the education of candidates for commissions into the Fighting Services. The Commandant would be, in rotation, an eminent soldier, sailor or airman, who had served with distinction in Combined Operations in the late War.

Students would be required to pass the usual University entrance examinations, and would become members of the College and undergraduates of the University at the age of 18; they would take their degrees and be commissioned at 21. For the first two terms students would receive their basic military—using the word "military" in its widest sense—education, and study as one class. They would then be required to pass Honour or pass Moderations in the subjects laid down; included in these subjects would be naval and military history, European and Empire history, military geography and French. Candidates for Honour Moderations would study German and other modern languages.

On passing this first examination, students would choose their Service and be posted to either the (a) Naval and Marine, (b) Military or (c) Air Wing. Each of these Wings would have instructors from its own Service.

From the date of joining their Wing to the end of their three-year course students would study for a degree, which would be one of the required qualifications for a commission. For Army candidates the subjects would be tactics, military organisation and administration, map reading, military law, etc., while those reading for an Honours degree would have a choice of special subjects, including Political Economy. Indian Army cadets would have Hindustani and Indian history as special subjects.

After being posted to their Service Wing each year of the course would be divided into (a) three terms of two months, (b) four months' practical training, and (c) two months' leave, taken in two periods of a month. During the "practical training" period students would wear cadet uniform, and in the case of naval cadets would carry out the training of a naval rating, ashore and affoat; Army candidates would do their practical training in the ranks at the Training Establishment of the arm of Service to which they wished to be posted; candidates for the R.A.F. would receive flying instruction at their Training Schools.

If it is desired to retain Dartmouth, Sandhurst Woolwich, and Cranwell as Service Colleges, cadets could do one year's basic training in those establishments from the age of 17 to 18, before being selected for the United Services College. In this case, students would choose their Service before going to the University, and be posted to their Wing on joining the College.

By a slight alteration in the University terms of the United Services College, the summer term could end on June 15, and the winter term begin on October 15. During these four months "practical training" could be carried out, and the College thereby utilised in one instance for a promotion course for sub-lieutenants, lieutenants, and flying officers; the following year this promotion course could be for naval lieutenants, captains (Army) and flight/lieutenants. In this way officers would come together twice during Service careers, friendships would be renewed, and ideas exchanged.

Here are some of the advantages of this system of education:

- (i) Candidates for the Fighting Services would spend their most impressionable years in a common atmosphere, and receive a more liberal education than under the pre-war systems. Such education is essential for a professional officer required to train and command men drawn from every occupation.
- (ii) Contacts made in such an environment would be invaluable in later years between officers of all Services, who would have known each other in their youth. It would be the first real step towards co-ordination of the Services.
- (iii) While undergraduates of the University, cadets would meet at lectures, games, and in the social life of the University men destined to hold important posts in the civil, consular and diplomatic Services, as well as future statesmen and leading Government officials.

If, after this comprehensive training and selection, cadets and officers should be found unsuitable or inefficient, the general education they had received would be of great value and would enable them to re-enter civil life more easily, and with greater chances of success.

3rd Cavalry To Be Re-Raised.

Overrrun and forced to surrender at Singapore early in 1942, the 3rd Cavalry—the first regiment to be knocked out of the war as a fighting entity—is being re-raised at Lucknow on April 1st, 1946.

The 3rd Cavalry ceased to exist after the surrender, and it is now being reformed from recovered survivors of the original regiment. Volunteers from other Indian Armoured Corps units will bring the regiment up to strength.

A unique feature of the new 3rd Cavalry will be the fact that it will have no separate class compositions for squadrons or troops. All classes of men—Hindus, Muslims, Sikhs, Jats—will be accepted and they will feed and live together without class distinction.

The reborn regiment will be the reconnaissance regiment of the Indian Airborne Division, and will be organised and equipped on practically the same lines as the standard Indian infantry divisional reconnaissance regiment.

Men selected for transfer to this regiment must all be volunteers, for their duty will involve parachute jumps. Beginning at Lucknow with a period of preliminary training, volunteers will then join the Airborne Division where they will receive parachute training.

The 3rd Cavalry came into existence in 1921 as a result of an amalgamation of two of the oldest cavalry units of the Indian Army, the 5th and the 8th. The history of these two units goes back to the days of the East India Company's Bengal Army. The 5th Cavalry was raised in 1841 and the 8th Cavalry in 1846.

WHEN EXPANSION AGAIN BECOMES NECESSARY

BY LIEUTENANT-COLONEL G. A. MITCHLEY.

during the First World War of 1914-1918. Before that time battles had been fought and wars had been won by a professional Army, whose exploits were idealised in the illustrated papers of the time, and whose bravery and courage were immortalised by contemporary poets and writers. The man in the street connected these wars in his mind with the colourful uniforms worn on ceremonial occasions and, as our own country was never invaded, he looked on the Armed Forces as something outside his life. All soldiers were brave, and their methods of obtaining success were mysterious though infallible.

During 1914-1918 the man in the street had to take his share alongside the professional soldier. The civilian soldier was initiated into mysteries which he had thought impenetrable and he discovered that there was no mystery. When peace came the civilian soldier withdrew into his civilian life and became immersed in the task of reconstructing his own world. Periodically he foregathered with his old comrades and they "reminisced" over the purple patches and condoned the mistakes committed.

As the 1914-1918 war was a war to end wars, and as the League of Nations was calculated to solve all major problems of the future where force might be required, the Professional Soldier once again took control of the Army and dedicated himself to the process of rebuilding an organisation which, in his opinion, had been seriously disturbed by the events of the previous four years.

Came the war of 1939-1945, which was more national in its nature than that of 1914-1918, demanding not only the services of men but also of many women, and bringing into the front like of battle the factory worker and the exempted few who were left to keep in motion the wheels of civil administration and commerce.

Now, once again, the process of release and demobilisation is in full swing, and the Army is being reduced to a peacetime scale. A question which naturally obtrudes itself at this moment is:—"Did the professional Army perform its task of expansion successfully?" and its corollary: "What must be done in the future to ensure successful expansion on any future occasion?"

It is a commonplace to say that in Wartime the professional army must face expansion and dilution; the professional soldier spends his whole life preparing for such an eventuality, and sees in its fulfilment opportunities for which his whole life has been dedicated; so if failure occurred, it must have been due to a wrong conception of the nature of the task and not to any lack of fore-knowledge of the object.

The arguments and deductions in this article are based on the Army, but they apply with equal, if not greater, force to the Navy, as Britain is a maritime nation, and to the R.A.F.—Author.

Here I propose to summarise the main facts which spring to the mind of any man, be he professional soldier or civilian, to examine the pros and cons and to produce a logical solution of the problem. At the end of the war of 1914-1918 and also of the war of 1939-1945, the facts which stand out clearly are:—

- (i) That powers of leadership, sense of duty, initiative, adaptability and personal bravery are national qualities, not the prerogative of the Professional soldier.
- (ii) That many professional soldiers of all ranks and grades failed when faced with the realities of war expansion and war conditions.
- (iii) That discipline as practised by the professional army proved extremely irksome to the civilian soldier who, both in this war and the previous one, could not reconcile his ideas of civilian "freedom" to his conception of military "servitude."
- (iv) That the red-tape, circumlocution, antiquated procedure and routine existing in the professional army not only mystified but enraged our civilian soldiers, many of whom had had experience of business principles and methods, and held positions of considerable responsibility.

By expanding each section in turn, a solution of the problem will emerge.

(i) That powers of leadership, sense of duty, initiative, adaptability and personal bravery are national qualities, not the prerogative of the professional soldier.

It was for the professional soldier a matter of surprise, as also admiration, particularly in the war of 1914-1918, that his professional training gave him no prerogative to those qualities expected of a soldier, and he realised that these qualities are latent within everyone, and that our system of upbringing and education develops them to a greater or lesser degree in everyone. Military training directs the employment of those qualities into military channels, and adapts them to the needs of a military situation.

Military training also tends to supply a system or formula whereby the lack of these qualities may be, to a certain extent, neutralised or compensated. Whilst our national principles and ideals remain, our qualities will remain.

(ii) That many professional soldiers of all ranks and grades failed when faced with the realities of war expansion and war conditions.

This fact has been full realised by Higher Command, who have already instituted an organisation of Selection Boards which attempt to weigh accurately the potentialities of our future officers. In my article "Officers Past, Present and Future," published in the April 1945 issue of this Journal, I endeavoured to outline a scheme for raising the standard of the would-be officer, and of maintaining that standard throughout an officer's service. If the system outlined in my article forms the basis of future training and selection, the number of misfits will be reduced to a negligible minimum.

(iii) That discipline as practised by the professional army proved extremely irksome to the civilian soldier who, both in this war and the previous one, could not reconcile his ideas of civilian "freedom" to his conception of military "servitude".

It has been realised fully that the civilian soldier, be he officer or man, does not take kindly to some forms of discipline as practised by the professional soldier. In my opinion the efforts made to meet this situation neither justify the

maintenance of the present system, nor have in any way decreased the civilian soldier's distaste for being regimented on every possible occasion.

On the other hand, it is innate in all of us to appreciate good drill and pageantry, and its value as a method of training for warhas proved itself on many occasions.

Again, the civilian who does not take a pride in his dress and bearing is a very small minority of the whole, and the complaint of the civilian soldier during this war has been, so far as dress is concerned, rather towards greater latitude in dress than in a distaste for good turn-out.

To a civilian, every man's home is his castle, and once inside his castle he is his own master: in theory he consults no one regarding his actions; in fact he is "off duty". In the Army, as is so often stressed in season and out of season, a soldier is never off duty and this never being off duty is more evident in war time, when not only the soldier but also the officer is rarely out of uniform in barracks and out of barracks.

In matters of the soldiers' comfort and welfare it has only recently been realised that the soldier is a thinking entity and if he isn't, something must be done to ensure that he is. Thanks to the efforts of the Army Educational Corps, whose work in this direction has produced a complete change in the mental outlook of the Army, the soldier is no longer an automaton.

This move, however, is a comparatively recent one, and its reaction on the professional army has shown how foreign it is to its nature to consider the soldier as a man who not only should, but must think, who not only should have private interests but must be taught to develop private interests.

The aim in this direction then must be that an Army, like any team or combination, must have team spirit and must bend to the will of the leader, but each man must be encouraged to express his individuality when the necessity arises, and mental and physical freedom must be accorded when possible.

In connection with the above, I have not mentioned "universal service" whereby every able-bodied man will in peacetime receive a certain amount of military training, as I consider this period of training will form an excellent opportunity to reorient the ideas of the professional soldier, not, as might be thought, an opportunity to produce throughout the country embryo professional soldiers.

(iv) That the red-tape, circumlocution, antiquated procedure and routine existing in the professional army not only mystified but enraged our civilian soldiers, many of whom had had experience of business principles and methods, and held positions of considerable responsibility.

Not one, but many successful generals have stressed the fact that success in war depends more upon good organisation and administration than anything else. Good organisation and administration connotes a smooth-running machinery, and the simpler the machinery the easier it is to maintain.

When the peace machine expands to a war machine, it takes from the civilian machine all the personnel it requires and rejects what is superfluous and unsuitable, and yet the result is not a harmonious whole. From trades and professions, from business houses and manufacturing firms a great proportion of the personnel are absorbed into the military machine with one object, and that is to ensure good organisation and administration.

Presumably the doctors, engineers, accountants, trained executives and assistants are competent in civilian life, otherwise their places would be taken by those who are. Presumably the organisation and administration of civilian firms and combines is efficient, otherwise they would go out of business.

The Army as an organisation has explained its essential difference from the largest combine by drawing attention to:—

- (a) the immensity of its size and complexity of its nature compared with the largest business combine.
- (b) the peculiar nature of its object, which is destruction and not construction.

Whatever its size, and whatever its object, the Wartime army does not absorb smoothly into its machinery the millions of trained civilians who are to work the military machine, and until it is capable of doing so, it is failing in its object.

Let us examine the case of the civilian doctor and engineer who becomes a part of the military machine. As regards professional qualifications it cannot be gainsaid that the civilian is the equal of his opposite number in the Army. Yet many of these highly qualified technicians both in this and the last war have failed to work smoothly in the military organisation, or to put the case from their point of view, their efforts are to a large extent nullified and their qualifications wasted. Similarly with highly trained accountants, bankers, executives, controllers of labour, etc. They cannot adjust the methods of organisation and administration by which they have achieved success in their own world to the military system.

Nor will the professional soldier (admittedly a trained grouser) deny that he finds the machinery, of which he is a component part, extremely slow in action and extremely galling in its rigidity. Is there any professional soldier who has not at one time or another re-organised his own office, introduced super-simple procedure and infallable methods of routine? Similarly with regard to stores and equipment and general administration. However big or however small the responsibility, we all feel we can improve on the methods of our predecessor, and that unless we do effect some changes we shall be considered lacking in initiative.

Occasionally, also, attempts are made to effect re-organisation on a large scale, and experts are consulted. Who are these experts? I will not commit myself further than to say that they are personnel who have been raised and nurtured in an atmosphere of routine, and whose minds are trained to regard forms and returns as the be-all and end-all of good organisation and administration.

The question of personal responsibility, particularly financial responsibility, has exercised the minds of Higher Command for the past half century, and the rules and instructions laid down have continued to exasperate professional officers who have been given positions of great responsibility. It can easily be estimated what is the effect of this type of organisation on the civilian soldier, who has been accustomed to making decisions and seeing them implemented because the project envisaged is necessary to the matter in hand, not because it has had the routine approval of some higher authority, or because it is within the terms of a series of conflicting Regulations.

It is beyond the civilian soldier's comprehension that a small matter, involving a few rupees possibly, should take so many man hours to decide, apart from the cost of postage and the psychological effect of delay and procrastination:

or that he is not allowed to introduce some new method, or exercise his own judgment without the concurrence of some more senior officer. In essence he says that the Army seems to be organised not to produce results, but to keep employed, in dealing with routine office work of a petty nature, the maximum number of personnel, and to this opinion the professional soldier has no logical answer.

Here then, in my opinion, are the essentials to making the Professional Army capable of absorbing the man power of the nation into its organisation with a minimum of dislocation both to itself and the civilian.

- I. Reorganisation of Army Organisation and Administration on lines more in conformity with the principles accepted in civilian organisation. To attain this object, it is necessary that:—
 - (i) Greatly increased responsibility and power of decision be delegated to officers of all grades. Delegation of responsibility to imply acceptance of responsibility.
 - (ii) Knowledge of business principles and methods, and their application to be an essential part of the training of every officer.
 - (iii) A committee composed of selected officers and business experts be appointed to formulate a new organisation based on civilian organisation and administration. Their task to be to make the dog (the fighting machine) wag the tail (organisation and administration).
- II. A re-orientation of ideas of the purpose of discipline and of the methods by which a disciplined army can be created. The welfare and education of the soldiers to be considered a very important part of that training. I am of the opinion that the professional soldier realises the necessity for a re-orientation of ideas on this matter, and will willingly accept constructive proposals.

III. The officer to be trained to consider himself to be the backbone and the brain of the modern professional Army, and capable of acting on his own initiative whatever situation may present itself.

If action is taken now, whilst our civilian soldiers are still with us, not only will a third world war be fought with greater economy of man-power, but the postwar professional Army will become an instrument of even greater power and of even higher efficiency when expansion again becomes necessary.

"Dagger" Division's Education Drive.

More than 2,181 illiterate men of the 19th Indian ("Dagger") Division's literacy drive have received instruction during the last three month in vernacular languages.

Every unit in the division regularly sends candidates for the 3rd class examination. In one month 218 candidates passed the examinations. At the moment, there are 3,120 candidates under instruction for certificates of education.

The education staff is meeting with many difficulties. There is a short-age of accommodation and equipment. Until recently they were using Japanese chalk captured at Mandalay, and some units are still improvising by writing with charcoal on walls.

A BURMA BALLAD

(With apologies to Rudyard Kipling).

We've taken our fun where we've found it, of variety there's been no lack, We've roamed from Moulmein to the Yomas, from Tiddim to Imphal and back;

We've also seen something of rivers, the Sittang and Chindwin and too The Irrawaddy, where the flying fish flee, to mention just only a few.

We started our revels in Rangoon, but we didn't stay there very long, For soon we moved on to the Salween, a position not palpably strong; So we shifted our berth to the northwards and there we awaited the Nip—We hardly could boast, we could sit still at most, doing our best to equip.

Thence we went steadily backwards through Pegu, Henzada and Prome, Back to the line of the oilfields, where we felt even farther from home, Mandalay passed on the skyline, Ava just flashed into view, We had to withdraw, in case somewhat raw, to Assam to refit anew.

There very few moments were wasted, with a confidence never lost, but increased,

And soon we were back in the Chin Hills, in conditions where a clash never ceased.

This went on for a season, we gave as good as we got,
With a keenness withal to avenge our withdrawal and show it was all
'tommy rot'.

In the plain of Imphal we then mustered and many a name we recall—Silchar and Moirang and Chingpu, Bishenpur and Kha Aimol—The scenes of the bloodiest fighting, where the Jap got the rudest of shocks, For they found to their cost they gained less than they lost, taking imperial knocks.

Then others continued the good work, while we were retired to rest And there an encampment soon flourished and the locals just feathered their nest,

Although we took life rather lightly, we still kept our eyes on the ball And, when at Yuletide, they said "You're for a ride", we answered "That's nothing at all".

By tracks devious and eroded, the river Irrawaddy was reached,
Where already another division a convenient bridgehead had breached,
It then was a race to Meiktila through Taungtha, Mahlaing and Oyin,
Flushing enemy in, though they're clever as sin, bunkers defended within.
We've taken our fun where we've found it, we've roamed and we've ranged
in our time,

We've had our pickings of Nippons and some of those pickings were prime, We've reversed the early decisions, British, Indians and men from Nepal; And we did it as such, 'cos we then knew too much, for the Sons of Heaven and all.

M. V. W.

GUERILLA WARFARE

By Major H. Simonds-Gooding.

GUERILLA warfare proper is carried out by armed civilian partisans in their own country against superior organised and armed enemy troops, Sometimes described as a "rabble in arms", they usually have their own peculiar methods of waging war which are very effective within local limits. They have two main roles: (i) ambushing the enemy, disrupting communications, and being a general nuisance to the rear areas; (ii) giving our troops timely information of enemy intentions and movements.

A successful ambush is the most heartening event for a guerilla. Not only does it mean a shock for the enemy, but it raises the morale of the guerilla party more than anything else. We practised several methods in the Chin Hills. One which always brought shrieks of joy to our men but screams from the enemy was the simple trick of sending two or three men to cut the enemy's telephone wire. They had only to be patient and sure enough not very much later the repair party would come along and get down to work. They never got enough time to get the join repaired.

On one occasion a party of four Chins pulled off a double ambush. First, they cut the enemy's telephone wire in a likely place, took up their positions, and waited. After some time a Jap repair party of three men appeared and began work. Our men accounted for all three. And then they waited again on the off-chance of the Japs sending out a search party for their missing comrades. Sure enough after some hours a Jap patrol, a section strong, appeared on the scene. They were moving along carelessly, and on seeing the bodies of their dead comrades, instead of advancing on them under proper covering arrangements, they crowded together round the bodies. The Chins accounted for three before they faded out into the jungle.

Another successful ambush method was to lay in wait near a track which had obviously been well used by the enemy, and usually it wasn't long before a mule train would come along and our men would have a grand time shooting up the Japs accompanying them.

Their second main role of obtaining timely information of the enemy's movements is really the more difficult. We used two methods. First, that of dressing a single Chin in his village dress and sending him alone and unarmed into a Jap-occupied village or area. The second was by deep patrol down into the Japanese-occupied Kabaw Valley. Here is an instance of when the first method was successful.

Our man's village was occupied by the Jap. He first of all laid some cleverly concealed booby trops on an important path in the vicinity of the village. Then he walked boldly on into the village dressed in his "levy" kit, carrying his rifle and ammunition. On being taken before the Jap officer in command he informed him that he was a Levy, and an inhabitant of that particular village. However, he wished now to settle down in his home and to desert the British service, of which he was sick and tired.

At first the Jap officer was inclined to be suspicious, but our man replied that he was prepared to show the Japs booby traps laid by the British near the

village, as proof of his good faith. This was duly accepted, and he showed the Japs the traps he had himself laid about an hour earlier. This completely won their confidence, and he was allowed to come back to the village on condition that he served the Japs as a guide. In fact, they were even prepared to give him rations. Four nights later he arrived back in our Levy post with the most detailed knowledge of the Jap positions.

The other method of long distance patrols involved going out for five or six days at a time. The strength of the party had to be sufficient to afford protection, and to be of such a number as would avoid any man having to do more than two hours sentry duty at night. Men have to travel as light as possible, be fit enough to traverse the worst possible country, and be able to live on shakapura biscuits and tea for a week at a time with rease. The most important thing is to see without being seen. Therefore the patrol must avoid becoming engaged with the enemy at all costs. Should an engagement take place, not only is the successful achievement of that particular patrol's object endangered, but the enemy will probably be on the alert for some time to come, thus making information very difficult to come by in that sector.

Morale is of even greater important with guerillas than with regular troops. Partisans are civilian volunteers and are usually fighting under adverse conditions. They have comparatively little sense of military discipline. Their main driving force is an intense personal desire to inflict loss and trouble on the enemy. For them a high degree of morale is vital, and it can only be achieved and maintained by tact, leadership and personality on the part of the commander.

"Urdu Made Easy."

"Urdu Made Easy" might well be the name of a scheme now being adopted by the Indian Army by which officers, cadets and British other ranks will have the benefit of a modern, scientific course prepared by the Pelman Institute, Delhi.

In future a complete Pelman Urdu Course will be provided free for each cadet undergoing training at the Indian Military Academy and at Officers' Training Schools in India. In addition, officers eligible to sit for the Urdu examination as well as British other ranks may enjoy the benefit of this system if they so desire.

Since all cadets who pass the Army Elementary Urdu Test after April 1, 1946, will have received free tuition under the new scheme, they will not be eligible for the reward of Rs. 100 previously given to those successful in this test.

Any officer who is eligible to sit for the Urdu examination and wishes to study by means of the Pelman System will apply through his Commanding Officer to the Secretary, Pelman Institute, 10 Alipur Road, Delhi, for a copy of the enrolment form. The payment for the course will be made by the Controller of Military Accounts concerned.

On passing the test, an officer who studies by means of the Pelman system will be eligible for a reward of Rs. 65.

The terms and conditions for British other ranks are the same as those for officers.

ORGANISED COMPOST MAKING

BY MAJOR J. H. AURET.

INDIA, once again, is on the brink of the precipice. It faces not the Japs—a man-made catastrophe—but famine. The Armies of India saved her in war. What can they do to save her in Peace?

Soldiers are diffident about dabbling in civil affairs. Famines are the concern of the civil administration, of the agriculturist, the scientist, the Deputy Commissioners and those who control supplies and transport, of the statistician and the medical man. The soldier can shrug his shoulders and leave such technical matters to others.

It is precisely this that has tempted me to write this article. I am not a farmer, or a scientist, or a medical man, nor even an administrator. I am a Regular soldier. As such I can give an assurance that the science of compost making is a simple and easy affair for the Army, and it is in that direction that I see the Army helping India in her fight against Famine.

There are many problems facing India—social, economic and political, but few compare in importance to that of the relentless pressure of the populattion on the land. There are many mouths and too little land to feed them with; India must feed her millions on less than an acre a head. This is the root cause of her depressing poverty, and, indeed, directly or indirectly, affects most of her other problems. Whether or not the surplus population could be drawn off the land through industrialisation, or whether population control. will ever become practicable are beside the present issue. At the moment, India's population is in grave danger of exceeding her food resources.

Even in normal times a large part of the population is living at a level of bare subsistance, their diet being not only poor in quality (lacking in sufficient of the protective foods, with their contribution towards the diet of vitamins, etc.) but also even of insufficient calory (energy) value. A famine merely accentuates the situation and thrusts it before the public eye. In actual fact the problem of food insufficiency is ever present.

A little can doubtless be done to increase the area under cultivation, but even here the scope is limited. Forests form an essential part of the agricultural pattern. Their presence or absence seriously affects rainfall, the amount of water in wells, irrigation and soil erosion. It is said that for agricultural purposes at least one-fifth of an acre should be under forest. Something can be done with bull-dozers—at a cost—to flatten and grade eroded land. Something can be done, by careful cultivation and manuring, to reclaim alkaline land. Nevertheless, the the real problem of increasing agricultural production lies in securing more food from our existing land resources.

To achieve this, two things are especially essential. One is more water, and the other is more manure. The former is in the province of the engineer. The latter is in the province of sanitation and refuse disposal, and is, more or less, in the province of every Army officer, and certainly of every unit C.O. and Quartermaster,

Nature in her wisdom has created the Wheel of Life, which is a process for continual change. It is her intention that life and growth should merge into death and decay to be revitalised into life once more. So it is that the forest grows, and the animals and the insects thrive, only eventually to die and mingle with each other until they become indistinguishable in the rich earth of the forest floor.

There is nothing smelly or unhygienic or unhealthy in the process. The air of the forest is fresh and vitalising, and quite unlike the air of the cantonment, with its stale smell of incinerator smoke. Cholera and dysentery are diseases of man-made towns, not of Nature's forests. Nature is clean and sanitary and healthy in the disposal of her wastes. She does not burn them; she does not collect them in dumps. She spreads them on the forest carpet in such a way that animal waste mixes with vegetable wastes, with leaves, and bark; pods with dead stems; dead ants mix with berries, and feathers with twigs. All Nature is interminably mingled in a hotch potch. The forest breeze aerates them. The forest rain dampens them. The forest sun warms them. These agencies turn the dead and disease ridden residues into healthy food for living plants, so that disease itself succours life.

No matter what the residues are, they decay into a dark, friable sweet peat mouldy-smelling earth. There is no obnoxious smell, no myriads of flies, none of the unpleasant unhealthiness that accompanies human efforts at sanitation. Nature's sanitation is perfect. It is not characterised by the waste that accompanies human efforts at cleanliness; it is a creative force. She does without modern sewage or incinerator. She would despise such clumsy man-made methods—would, in fact, regard them as criminal, as, indeed, they are. For Nature regards all waste as potential humus, as the very life of the soil which feeds the vegetable and animal kingdoms, and man himself.

Humus is the basis of all life. For a humus-filled soil will produce healthy crops, with a high vitamin content, and disease resistant. These qualities are passed on to the animals that devour the crops. Man, too, equally benefits by eating both the crops and the animals, and the animal products that have thrived from humus-filled soils by better health and disease resistance. Man, by destroying his wastes, indirectly destroys his own food and his own health.

Humus itself might be called the living earth. Humus is the resultant organic substance formed by the decomposition through germentation of natural wastes by means of certain bacteria and fungi. Humus is an aerobic product, the result of the work of bacteria and fungi that require air. Putrefaction is not caused by these agents, but by bacteria that decay material without air. Compost is produced by fermentation and not by putrefaction. Hence compost is a healthy, cleanly substance, devoid of the smells and obnoxiousness of the latter. These unpleasantnesses are all too often the result of man's behaviour, which is seldom modelled on natural processes.

Compost is the atomic bomb with which to fight famine. It is formed by incorporating animal (including human) and vegetable wastes in such a manner as to decay them by fermentation. This compost is a highly humus containing product. It contains those important plant nutrients, nitrogen, phosphorus and potash in a well-balanced proportion. It also contains all the necessary trace elements which, although present in very small quantities, are so necessary to the health of plants. Compost is, in fact, the complete plant food. And of all composts, that made from human wastes and habitation rubbish is the richest, having a high nitrogen and phosphoric content.

To sum up, then, it is with compost that we must fight not only this famine, but normal food insufficiency, After composting, wastes become immediately digestible to the plants. Compost supplies humus to the soil. Not only does humus ensure healthy plants, but it maintains the soil texture in good condition. It retains moisture in time of drought, and facilitates drainage when water is in excess. It also has a residual and cumulative effect. Compost feeds plants with essential minerals, nitrogen, phosphorus, potash and the trace elements.

Surely it is criminal, even in normal times, to burn the raw materials that make this stuff? A look at the thin Indian peasantry should answer this. Perhaps one day there will be a tax on incinerators.

So much, then, for generalisations about compost. How is it made? There are various methods and modifications, but all are governed by certain general principles. So long as these are fulfilled, any method is correct. The requirements of composting are:

- (a) Animal Wastes. These form the activator or starter. It is largely the bacteria and nitrogen in these that break down the wastes into decayed manure. Urine is particularly rich and should be included where practicable. The smell of ammonia is a sign of the waste of nitrogen going on.
- (b) Vegetable Wastes. These act as an absorbent to the above, and provide bulky organic matter. Anything of vegetable origin may be used—leaves, bhursa, garden and crop wastes, lawn cuttings, kitchen wastes, habitation rubbish, etc. Paper in small quantities is not harmful, but ink and chemicals of various sorts inhibit bacteria. Hard items like large quantities of sugarcane need to be bruised first.

Normally three or four parts by volume of vegetable wastes should be composted with one part of activator. Often, in cases like a mule company, the animal wastes will be much more than a quarter of the total. This does not matter; whatever proportion is present may be composted.

- (c) Air. The bacteria and fungi that decompose the wastes are aerobix (requiring air) in the first stages. Heaps must not be trodden on or compressed, as this tends to exclude air. If air be excluded, then nature decomposes the heap by putrefactive anaerobic (not requiring air) bacteria. Correct aeration is a cardinal point in composting.
- (d) Moisture. The pile must be moist, because the bacteria use water for decomposition. The heap should be as moist as a squeezed out sponge. If dry, the decay slows down. But the heap must never be sodden, for then the water excludes air, and putrefaction and flies begin to work. A little experience soon teaches the correct moisture required. This moisture content is closely interlinked with aeration; correct moisture content is the key to successful composting.
- (e) A Base. In decomposition some acidity is formed which inhibits the bacteria. Some wood ash (plenty is available in the cookhouses), earth or slaked lime, or a mixture of these should be added to counteract acidity. A double handful per barrow load is about correct, or a sprinkling of half-inch to every six-inch layer of compost.
- (f) Heat. The compost heap will quickly ferment to a heat of 150 degrees F., or more. This kills fly larvae, and harmful organisms, and weed seeds. Some fly larvae from eggs resident in the original material will hatch in the

beginning on the colour surfaces to start with, but will die before maturity. Flies in our Tochi Scouts' Posts, have much decreased since the introduction of the composting of all wastes.

We have found that the amount of labour required for composting is less than for incineration, in which bhangis have to be continually stoking up. In composting , all wastes are disposed of on arrival. A unit can compost its wastes without further addition of staff. It is necessary, however, for some properly trained N.C.O. or V.C.O. to occasionally see that the bhangis are carrying out orders properly, and to keep records of manure made, and finally to arrange its disposal. For the latter a price of, say, Rs. 1-/8 per ton is reasonable. A ton may be taken as 50 cubic feet; a cartload is generally taken as half a ton. Exsoldier cultivators should get preference and perhaps reduced rates.

In my own Corps 3,500 men, split into nine Posts, and including about 120 animals, produce about 1,700 tons a year. In actual fact our production would greatly exceed this, but our Posts are dotted about in arid tracts, and vegetable waste is very scarce.

Finally, there are some details of the methods we employed in the Tochi Scouts. We compost night soil and animal wastes in different heaps. Normally, the nightsoil is handled by sweepers only until it is removed from the charging trench; from the charging ground onwards it is handled by troops, who carry it off to spread over the gardens. The results on the produce are excellent.

The manufacturing trench is two feet deep, fifteen feet wide and as long as required. Heaps are charged by laying a rubbish layer three or four inches deep, and placing as much rubbish again on these heaps in piles. The nightsoil is poured evenly and thinly around the piles, which are then lightly raked flat, thus allowing a large area for aeration. A heap is laid along one side of the trench, and inwards for five feet, and as far along the trench side as necessary. The rubbish contains sufficient cookhouse asnes to act as a base.

On the third evening it is watered, should it be dry, and on the fourth day the heap is turned by forking it over to the opposite side. Similarly on the 8th day the heap is turned by forking towards the head of the trench. On the 24th day it is removed from the trench, fully mature and stored in a pile ready for use.

In very small Posts (of three or four platoons only) the same treatment is used, but the compost is collected in a New Zealand box specially designed for the purpose. The reason for this is that as the quantity of wastes is so small, a decent sized heap cannot be made in one or two days. Hence the wastes are gradually collected in a box which protects them from wind and rain. The former cools, and the latter interferes with the aeration of small heaps. In the case of big heaps of 5 ft. by 2 ft. by 3 ft. or greater, the surface area is less as compared to the volume than is the case of a small heap, and the interior heat is sufficient to counteract harmful effects.

Full details of this system are available in the Institute of Plant Industry, Indore, Bulletin No. 1, ("The Sanitary Disposal and Agricultural Utilisation of Habitation Wastes by the Indore Process").

The animal wastes are composted in heaps 16 ft. wide, 2 ft. high and as long as required. The heap will sink and slowly dry. When it rains the outer 4 ft. of each side of the heap are pitch-forked on to the centre. Again, after three or four weeks, or when rain subsequently occurs, the whole heap is turned.

Sometimes yet a third turning is given after a further three weeks. The compost matures in about four months. On a permanent site, where large quantities are composted, a water and hose system would be most convenient to replace the less punctual rain. Some earth also is added to these heaps. Here again a detailed technique is available in Bulletin No. 2, "The Supply of Humus to Soils", issued by the Institute of Plant Industry, Indore.

The N.C.Os or V.C.Os supervising composting naturally require written directions. In every Tochi Post the N.C.O. in charge has a pamphlet in Roman Urdu explaining not only the technique but also the principles; this enables him to act intelligently, and is better than a mere list of rules. Some such Army Roman Urdu pamphlet is easily printable.

As regards organisation, it is best left to Station Commanders' as to whether composting should take place in individual units, or whether it should be centralised. This is merely an administrative rather than a technical question. Such questions arise as economy of labour, collection, distribution of manure, transport availability, convenience of sites for charging trenches and so on.

Finally, if the Army displays that energy over the problems of peace that she has displayed in war, large-scale composting can take effect in each and every cantonment at once. A week or so will be required for organisation; even so, the first piles may well appear within one month, to be followed by thousand-ton after thousand-ton of compost, which may help India in her desperate plight.

ADDITIONS TO THE LIBRARY

POEMS FROM INDIA (Oxford University Press, Bombay) Rs. 3, is an Anthology of poems composed by members of the Forces. The poems, chosen by Majors R. N. Currey and R. V. Gibson, cover a wide range, and convey a kaleidoscopic picture of the Serviceman's life in the East. Among the many excellent verses included in the Anthology is Major P. R. Boyles' "Burma—Defeat and Victory" which runs:

Waiting, waiting now, the battle done, The little wind of God blows through the mind And turns the brittle leaves of memory; The newest memory of our thoughtless kind. The branches stir, of lately sleeping thought, And, sluggishly at first, the whole tree wakes After the hail that lulled it into sleep. We are the tree. The grasp of winter breaks; Yet still the voices of the spring are hushed. We have but memory of the winter passed And Hope, born with the dawn (so late the dawn), That strength may be restored to us at last. We stood upon the drear and misty hill And turned and gazed whence we had come, and saw The hungry vapours writhing in the vale; The ghosts who fought with us but fight no more, no more. Above the burning world we made our fires

Above the burning world we made our fires
And cooked our rice, and shivered in the rain,
And slept, and rose, and turned and marched away;
And who knows if we shall come back again?
We were the fighting men; we bore our arms
To battle, fought, and left our dead behind;
Sorrowfully marched toward the setting sun.
Cold on the mountain wails the little wind.

High on the hills the paean throbs and rings,
Over the clouded peaks. Among the trees,
Through the deep valleys, down the forest trails,
Toward the sunrise with the morning breeze.
Splendid has come the dawn and bright the day;
The fallen die in victory at last:
The camp fires of the living glow more bright
For all the sorry darkness that is past.
This is the fight we dreamed of long ago
When all our fighting led but to defeat.
This is our battle and our hour, nor evermore
Shall we pass through the mountains in retreat.
Strong blows the wind towards the rising sun;
The winds of God, the tide of war, have turned.
Thanks be to Him, peace to the restless ghosts,

hanks be to Him, peace to the restless ghosts, Strong in our arms and hearts, we have returned. "Defence is our Business", By Brigadier J. G. Smyth, V.C., M.C.—Is a book for all interested in the Empire and its defence. The author suggests that the size and organisation of our post-war forces is to a great extent a business proposition. If our post-war defence force is too weak, we shall become a second-class power; if it is too strong, it will adversely affect our trade, our prosperity and our standard of living. His chapter on "Our Post-War Defence Policy" is both interesting and instructive. He stresses that "just as we want a better Empire Trade Policy and a new Empire Air Policy, so we must have a well co-ordinated and practised Empire Defence Force ready and able to operate at any point in the world." The book is a most fascinating study, and being written by one who knows his subject well, it carries conviction.

"World War: its Causes and Cure", By Lionel Curtis.—Unlike many authors who deal with this subject, Mr. Lionel Curtis does not lay the blame for world war upon any particular nation, party or group of individuals. He researches scientifically into the political and economic world of yesterday and to-day, and argues that the system of national sovereign states must give way to an international organisation enjoying universal support. The powers of the International Government, he says, should be limited to defence, foreign policy, colonies and civil aviation. All other internal and social affiars should be left to the national governments.

He warns his readers that all political parties, as at present constituted, are merely concerned with votes and party politics, and have no real conception of the issues at stake. Finally, the author suggests that the political systems in the world require a surgical operation and must be imbued with a new moral outlook.

- "Military French", By Francis Denoeu.—Is a thorough attempt to give the student a grounding in French military terms. Each lesson is planned on the basis of acquainting him with the elements of French grammar, and at the same time building up a progressive account of every aspect of military life. The latter is presented bilingually in two parallel columns. The book is no mere phrase book, and requires a certain amount of study on the part of the interested reader.
- "British Soldiers", By S. H. F. Johnston.—Is one of the latest books in the well-known series "Britain in Pictures," and gives the history of the British Army from the formation of Cromwell's New Model Army in 1645 down to the second World War. The historical detail is written with a lightness that makes this work easily readable. An interesting account of the military leaders of each period adds considerably to its value. The author comments on the popular feeling towards the British Army, which has so often resulted, in times of emergency, in its inadequate strength and lack of preparedness, due to reluctance to finance it on a sufficient scale. The story of British campaigns in Europe, North America, India, South Africa and other lands is briefly traced. The book has 25 illustrations in black and white, and eight well-produced plates in colour.
- "Merchantmen At War".—Issued by the Ministry of Information, gives a factual and comprehensive account of the life and work of the Merchant

Navy. The reader will find descriptions of the various types of merchant seamen, the procedure for sailing orders, the transport of cargoes, the experiences of survivors from action on the high seas, the organisation convoys and the chief convoy routes of the war. The vital part played by the Merchant Navy is set out with a wealth of enthralling detail. This booklet is a well-deserved tribute to our Merchant Navy and its work in keeping open or lifelines. It is excellently produced, and has some fine illustrations.

"Stalin", By J. T. L. MURPHY.—Is a historical survey of the life and career of the Russian leader. The author traces the influences which affected Stalin's youth as the son of a Georgian shoemaker, how he became attracted to the doctrines of Karl Marx, and his early activities as a member of the Bolshevik Party. The collapse of the Tsarist regime and the growth of the Socialist revolutionary movement are portrayed in detail. The full implications of the struggle between Trotsky and Stalin, together with the associated trials reveal the enormity of the task confronting the Soviet leaders in constructing the Soviet State and their determination to brook no internal opposition.

The story unfolds with the building of the new Soviet civilisation, the reasons for Stalin's changed attitude to the World Revolution, and the orientation of Russia's foreign policy from its former principles with the disbandment of the Communist International. The frequent quotation of extracts from the speeches of Stalin and other leaders should help to clarify the reader's mind regarding the trends and purpose of Soviet policy from the Revolution down to 1944. The book contains several interesting illustrations.

"The Red Army", BY MAJOR-GENERAL FOMICHENKO.—Is a concise but complete account of Russia's military forces. The whole career of the Red Army is revealed, since its inception during the days of the Revolution, to its final triumphs over the Nazis at the end of 1944. The entire course of the fighting on the Soviet-German front is outlined in considerable detail. There are chapters on the instruction and training of the Red Army, on its officers and generals, and its cultural and educational activities.

Algiers 1941-1943, By Renee Pierre-Gosset.—This book presents a French woman journalist's eye-witness account of the liberation of North Africa from the influence of the Axis Powers. Vivid portrayals of the characters and action of French political and military leaders such as Darlan and Weygand add a personal note to the narrative, which will certainly not fail to hold the reader's attention. The later may, indeed, feel somewhat overwhelmed with the wealth of information and personalities hitherto unknown to him.

Particular emphasis is placed on the importance of Franco-American relations during Franco's great ordeal. An interesting touch is provided by the revelation of a monarchist plot linked to the assassination of Darlan in December, 1942. The political negotiations of the Allies with Darlan are regarded by the author as a question of expediency. A description of social conditions in North Africa during the two years completes a work of very considerable interest.

"Scotland", By Jan Finlay.—Is one of the Oxford University Press "World Today" series, and is an academic survey of Scotland's historical and cultural development. The author gives a sketch of the country, its peoples and their institutions, and of the former power of Crown and Church. Those who incline to visualise Scotland merely as the land of the kilt with a romantic past associated with the names of Robert Bruce and Mary Queen of Scots will find much material here on the vital issues with which Scotland is confronted to-day.

Her contemporary problems, similar to those found in other countries, include the question of Scottish nationalism, extensive unemployment, the housing shortage, Glasgow's high infant mortality and the difficulties faced by Scottish farmers. A light touch is added by comparison of the different characteristics of the Highlander and the Lowlander and a passing reference that golf, reflecting the traditional national character of the Scots, is to Scotland what cricket has been to England.

"The Union of South Africa", By P. P. Balsara.—Presents in 32 pages a clear and concise picture of South Africa's background and problems. The pamphlet begins with details of the Union's population and climate, agriculture and mineral resources, followed by its rather brief history, which together with the rest of Africa is responsible for the term "Dark Continent."

The author emphasises that there are three great problems which the Union Government has to solve—the race problem, the problem of gold, and the demand of the Dutch nationalists for a Republic. The pamphlet concludes with a reference to the spirit of fear for the future which pervades the country, and must be eradicated if South Africa is to retain her position in the world. This pamhlet presents a considerable amount of information which can be easily read in half an hour.

"Tibet", By David Macdonald.—Is another Oxford pamphlet, which gives a brief survey of the geography, history, culture and commerce of that country. The importance of Tibet's trade link with India is mentioned, in addition to her cordial friendship with Britain, but it is emphasised that Tibet desires freedom to manage her own affairs without foreign interference. Much of the historical detail is too remote to be of interest to the general reader; neither is it presented in such a manner as to be easily digestible to any but the student of Tibetan affairs.

LETTERS TO THE EDITOR

THE RE-BIRTH OF A REGIMENT

To the Editor of the U.S. I. "Journal."

Dear Sir,

I read with great interest in the Journal for January 1946, the article

entitled "The Re-Birth of a Regiment", by "Madrassi".

Nearly 27 years ago I also was posted to a Madras from a Sikh Battalion, and I remember vividly to this day my feelings of disgust at the time, of being posted to a unit consisting of Tamils, Telugus, Parayans (as they were then called—now Adi-Dravidas) and Christians. My feelings then were exactly those of "Madrassi" when he was posted from Simla to a Madras Battalion. But, like "Madrassi", it was not long before I found that my ideas, picked up in the North of India, were entirely at fault, and from that time till this I have never for a moment wished for anyone better to serve with than the Madrassi soldier.

The Northern Sepoy and the Southern are both good soldiers, provided they have good Officers. But because the Madrassi is a Dravidian and entirely different from the Northerner, as the writer of "The Re-Birth of a Regiment" justly points out, that gives the Northerner no right whatsoever to look down on the Southerner. Who did all the fighting in India during the 18th Century? The Madras soldier with a sprinkling of British troops. What Battalion stood firm when most others were streaming back through them at a certain badly mismanaged landing in East Africa during the War of 1914-18? A Madras Battalion. What Battalion was named as the best on the British side by the Turkish Commander in the Aden Hinterland in the 1914-18 War? Again a Madras Battalion.

Which Recruiting Area in India produced the largest percentage of recruits during the War of 1939-45? The Madras Recruiting Area, in spite of the fact that few recruits were demanded from the Area for the first year or two of the War. Has any of the three Battalions of the re-born Madras Regiment that have been in action overseas in the 1939-45 War proved unreliable, untrustworthy, or un-anything else, in spite of the fact that almost without exception not a single V.C.O., N.C.O., or man has more than about five years' service? They certainly have not!

The Q.V.O. Madras Sappers and Miners have always retained a reputation above reproach—even the Northerners admit this, and quite rightly so! But their men are exactly the same as those enlisted for other Madras Units. So what possible just grounds can there be for the idea that the Madrassi soldier is not as good as any other Indian soldier?—providing that he has good Officers,

and this applies to any troops.

The enormous expansion that took place during the War of 1939-45 in all Services, Formations and Units, was made possible greatly through the fact that so many recruits came forward so willingly from the South, at a time when the North was drying up. Has any Officer who has actually served with the Madrassi elements of these expansions ever expressed the opinion that the Madrassi was not well worth his place? I have talked to many, including a number who have been transferred from Northern units, but have yet to meet one who is not enthusiastic over the soldier from Madras.

Although, as will be seen from the above, I am in agreement with the large majority of "Madrassi's" article, there are one or two points over which I would 'take him up'.

"Madrassi" says: "Madrassis...do not like service on the N.-W. Frontier—not because of the toughish life, but because of the extremes of climate and distance from their homes. Everyone volunteered for drafts to Battalions in Burma, but there was an ominous silence when Battalions on the Frontier were mentioned. This may possibly have been the cause of the old Madras Battalions falling into disfavour in the days when the Red Flag of the Rearguard was the be-all and end-all of I.A. training. The Madras Sappers and Miners have always done extremely well on the Frontier, however, and there is no doubt that as the Madras Regiment grows older it will also acclimatise itself to that part of India."

The Madrassi is certainly not afraid of "the toughish life of the Frontier". In fact, I have known him up there compete equally with the justly renowned Gurkha on the hills and he has out-done a number of North Indian Battalions

on the hills, marching and working.

The extremes of climate are undoubtedly severe, and are far in excess of anything which the Madrassi has ever encountered in his own part of India. He needs looking after, as anyone else does, but he gets used to the climate. In the Khyber Pass in 1919 during the record hot weather of that year, followed by a record cold weather, the Madras Battalion with which I was serving was out all day and every day, and had the lowest sick figures of all units in the line and, except for ourselves and a Madras Field Company, all other units in the line were either British, Northern Indian, or Burmese.

I submit that one of the main reasons why "Madrassi" did not find the same alacrity to volunteer for service on the N.-W. Frontier as for Burma was because the men knew that they would see something of the War in Burma, whereas they saw little hope of moving from the Frontier in time to join in Active Service. I know that was the feeling in one of the Battalions which I commanded.

A prejudice, unmerited by the men, has existed for a long time against the Madrassi; the prejudice has lessened, but it still exists to some extent. Our present Commander-in-Chief and our late Governor of Madras have been instrumental in the re-birth of the Madras Regiment, and I do not think that their trust has been betrayed by the re-born Regiment or other Madras soldiers. The Madrassi is free from petty intrigues and caste prejudices; he is amenable to discipline; is cheery; has an excellent sense of humour and a real smile; he will work all day—and then some—for Officers whom he knows to take an interest in him and whom he respects; he marches well and has plenty of guts; he is loyal and unusually intelligent; he is clean in his habits; serves willingly Overseas and there are vast numbers willing to enlist; he gets on very well with British troops; he likes his food, but is not bound by religious scruples over food and drink; he knows little-if any-Urdu and far prefers to learn English, which is useful to him in his own part of India; he is not naturally smart in his turn-out, because in his village he seldom wears much more than a loincloth; he spends money; is rather partial to the ladies and he is inclined in a childlike way to overstay leave. With good Officers he is as good as any other Indian troops and better than some.

Yours faithfully, "CHENNAPATNATH"

Bangalore.

"SOME ARMY NICKNAMES"

To The Editor of the U.S. I. "Journal."

Dear Sir,

I don't know who "Mouse" is, but he may be interested to hear that it is just on forty years since I went out to India to take the place of the bloodier of the two heroes of the witty rhyme he quoted in his article in your October, 1945 issue. And I hope he won't mind my suggesting some slight amendments which bring out its full flavour. Here is the original as I heard it, long before I went to Simla:

Two.....there were of equal worth,
But not, alas! of equal birth,
And he who said his blood was blue
Was much the bloodier of the two.

This version has the further advantage of being really true. It certainly was not "he whose blood was really blue that was the bloodier of the two" but he who said so.

Please tell "Mouse" how much an old soldier has enjoyed his article. It has brought back so many pleasant memories. His last paragraph (in which he referred to the number of Field Marshals with nicknames) is striking, and I can strengthen it by adding the name of Milne, who was well known to his contemporaries as "Brindle".

May I add my congratulations on one of the best numbers of the Journal. I always look forward to its arrival, and am never disappointed. Your new cover is very nice.

Shropshire Club, Shrewsbury. Yours sincerely, JOHN HEADLAM. Major-General

"Mouse", and many other readers will be most interested in Major-General Sir John Headlam's interesting letter. For his encouraging remarks in the last paragraph we are most grateful.—Ed., U.S.I. "Journal".

A COMMON SERVICE LANGUAGE

To The Editor of the U.S.I. "Journal".

Dear Sir,

After the war of 1914-1918 the question of the co-ordination and possible amalgamation of the three Services was hotly debated, and no doubt we will hear a similar debate now. There is certainly a wealth of material on which to base arguments, for never before in our history have we had so many examples of combined and joint operations involving all Services and many different nationalities.

Previous efforts to consolidate and improve the co-operation of the Services have started at the top, and arguments have centred round the advantages and disadvantages of a Defence Minister, or have sought to evolve a combined staff at the head of all Services. No doubt the equivalent of these things were available to the builders of Babel, but it was due to the lack of a common language and not to the lack of common direction that they "left off to build the city".

Let us therefore for a change start at the bottom, and try to evolve at least a common language for the three Services. Then whatever the organization at the top, those actually fighting and working together will at least understand one another without difficulty. It is absurd that the sailor should cook his victuals in a galley, whereas the soldier, possibly next door to him, should cook his rations in a cookhouse. Think, too, of our poor allies! English is a difficult enough language in any case without adding complications to it, and with an active United Nations Organization we must adjust our ideas to working even more closely than before with allied forces.

In India, with the formation of the War Memorial Academy for cadets of all Services, this problem will demand a solution. Will a cadet ask what rig he should use when on liberty, and be told by his instructor to wear a certain order of dress on leave? Should his answer be, "Yes, Sir" or "Ay, Ay, Sir"?

Whereas the sailor keeps his memoranda in dockets and packs, the soldier keeps his correspondence in files and cases, and every Service has its own systems of making minutes. The Services can't even address a letter in the same way. Whereas the R.A.F. address a letter to a Headquarters, the Royal Navy address it to the Commander, and the Army on certain occasions address letters to a staff officer. The success with which the Service Staffs have worked together in this War in spite of these and other difficulties is a tribute to their powers of adaption and the flexibility of their outlook, but can hardly be considered the logical outcome of the merits of our system.

Not only do the different Services use different words, but they even attach different interpretations to the same word. When the soldier says that a thing "will" happen, he conveys an order. To the airman this conveys a statement of fact and he, like the sailor, prefers "is to" as the form to be used for orders. "Administration" is another snare. All three Services give this

word a different interpretation.

Abbreviations give rise to further differences. Is a "C.S.O." a Chief Staff Officer or a Chief Signal Officer? And some signals full of authorised Army abbreviations are double dutch to the other Services. This war has at least evolved an alphabet common to all our Services, and the Americans and we have even managed to co-ordinate signals procedure to a reasonable extent. Can we not go one stage further to words of one syllable? "E.T.A." amongst others is common to all Services, and there is no reason why we should not increase the common vocabulary of useful, as opposed to confusing, abbreviations.

Titles of staff officers might also be put on a common basis. The Staff Officer (Q) of one service blossoms into the Deputy Assistant Quartermaster-General of the other. The Senior Equipment Staff Officer or the Senior Naval Stores Officer have no equivalent in the Army. All three Services use petrol, but the staff officers that deal with this subject have totally different titles, not for that matter do the Services even refer to it by the same name. What is

"M.T. Spirit" to one is "Mogas" to another.

For India the problem of agreeing on a language and a set of terms common to all Services is urgent, owing to the projected Academy for all Services. For the rest of the Commonwealth it is a problem of more than academic interest which merits a solution now before new doctrines crystallize and new text books are written. We want a common Service language throughout the British Empire. Indeed, we should take a broader view and make efforts to agree with the Americans on the meaning of terms as far as possible. Thus, at any rate, the English-speaking parts of the United Nations could work

together more smoothly in whatever organization of force the U.N.O. may set up.

Is it too much to ask that India should take the lead in tackling this problem? Tackling it with respect, but not with slavish adherence to tradition. Let us, like the builders of Babel say, "Go to, let us build us a city and a tower". But in order that it may be a tower of strength let us reverse the process of Babel and evolve a common language from the present confusion of Service tongues.

Hong Kong.

Yours faithfully, M. C. PERCIVAL-PRICE. Colonel,

HINTS FOR DEMOBILISED EX-OFFICERS

To The Editor of the U.S.I. "Journal".

Dear Sir,

After studing the literature and official announcements concerning demobilised ex-Service men before I left India I gathered the impression that there would be no difficulty in ex-Service men securing suitable employment without any great delay after their release in the U.K. My experience, I am sorry to say, and the result of inquiries into the subject, do not bear out this belief.

Legislation passed during the war requiring an employer to reinstate employees who have been called up has the effect of reducing the number of vacancies open to competition, and operates decisively to the detriment of (a) Ex-Regular soldiers (especially I.U.L. personnel), and (b) those who were called up before they were employed in a gainful occupation.

Recruitment to industry is restricted by this legislation, and the director of an important South Wales engineering concern told me recently that whilst it was operative it would not be possible to recruit men for jobs. Rather would jobs have to be fitted to men, i.e., to the former employee who has in most cases outgrown his original job.

When I reached Britain in December, 1944, I registered in the Appointments Branch of the Ministry specially run in London for ex-Officers, and also at the Appointments Branch here in Birmingham. To date, the only definite result has been the submission of my name to a firm in the Midlands. I understand that the Appointments Branch in London recommended me, but I have heard nothing since.

Having heard nothing from the Appointments Branch in Birmingham up to the end of January, I applied for an interview with the officer in charge. He was an ex-temporary officer, and was most sympathetic towards ex-servicemen. But he had to admit that the positions he could offer were few and far between, and that the pay and conditions of some were not such as would attract one who had held a position of responsibility in any of the Service. He suggested that I see the War Officer Liaison Officer (a Regular) in the same building.

This officer assured me that the Ministery of Labour was doing everything it could to place ex-servicemen, and that he was satisfied that the officials were genuinely desirous of being as helpful as they possibly could be, but things were very difficult. Both Civil and Military officers appeared far from optimistic, and both agreed, though not in so many words, that there was still considerable prejudice against the regular soldier.

To me it appears that the ex-serviceman (especially the ex-Regular) must get out of his head any idea that he will be shown any special consideration because of his service to his country. The sole consideration in the labour market (apart from the concessions given to all disabled persons) is a cash one—can the man do the job better than his competitor? If so, he is likely to get the job, provided it cannot be done more cheaply by other methods.

Good jobs are few, and with the inevitable uncertainty of the future there is likely to be a considerable number for whom the lowest paid work only will be available, *i.e.*, what the Ministry of Labour calls "strong healthy labourers", for which there is a large demand. The ex-Serviceman must consider deeply and clearly what he wishes to do, and must be prepared to face hardship if he wishes to nick and choose in the labour market.

if he wishes to pick and choose in the labour market.

Here are some points which may be useful for the Home-going Service-man:

1. He should take advantage of any form of training he may be able to get before his release from the Service. He should be prepared to defer his release if by so doing he may take up training which will be likely to help him later in civil life.

2. He should not entertain big ideas of what he is likely to obtain in civil life. No consideration is likely to be shown on account of his service. The feeling is very widespread that those who stayed at home had more of the

hardships of war than many who served overseas in the Forces.

3. He should register with a branch of the Ministry of Labour in his own home locality, or if an officer, with the Appointments Branch, Ministry of Labour, London, before he leaves his overseas station for Home, i.e., as soon as his group is shown as "coming up" for release. On reaching England he should at once re-register with the above. He should not wait until his release leave is completed and his pay ceases, before re-registering.

4. He should be prepared to accept employment of a nature, or on lower pay than that which he wished to accept, rather than await a possible better job which may not eventuate. A man may rise even in civil life by hard

work and devotion to duty.

5. If not already a member, he should at once join his Regimental Association or the British Legion. Apart from thus being in a position to help others, and maybe should occasion arise obtain help for himself and his family, he will continue to keep in touch with comrades of his own standing.

6. If he has no opportunity of exerting influence; if he has no trade; and if he has no 'pull', he should consider remaining in the Service. Letters published in the *Birmingham Mail* recently showed that certain ex-Soldiers had been advised by the Ministry of Labour to re-consider returning to the Army.

7. He should refuse employment in which any Service pension is taken into consideration in fixing wages. Cases do occur occasionally. They should

be reported at once to the Ministry of Labour.

8. He should be prepared to give good service in return for good pay. Generally speaking, wages are high, and though Income Tax bears heavily on overtime pay, there is always something in the pay packet worth taking home. But it is wrong to expect good wages for poor work, and equally wrong to accept poor wages to the detriment of others.

The Ministry of Labour officials are, I am convinced, doing all they can

to help the ex-Serviceman, but times are largely against them.

Yours faithfully, "DEMOBBED".

NOTES BY THE SECRETARY

New Vice Patrons

H.E. Sir Olaf Caroe, who has accepted an invitation to become a Vice-Patron of the U.S.I., on becoming Governor of the North-West Frontier Province, was formerly Secretary of the External Affairs Department, and for many years has been an ex-officio member of our Council. During that period he has taken a very deep interest in the progress and activities of the Institution, and his advice and assistance have always been of very great help.

On his assuming the appointment of G.O.C.-in-C., Eastern Command, Lieut-General Sir Francis Tuker has accepted an invitation to become a Vice-Patron of the United Service Institution of India. For many years past, under the pseudonym of "Auspex" and "John Hellard" he has been a regular contributor to the Journal of the Institution, and his writings and constructive criticisms have revealed his vast knowledge of military history. During the Great War he served in Mesopotamia, India and Persia; between the wars he fought on the North-West Frontier of India, and commanded a Gurkha battalion in the operations of 1937-38.

In 1940 he became D.M.T., and in 1941 left his staff appointment to raise the 34th Indian Division. His next command was the 4th Indian Division, which he took over in Cyrenaica on January 1, 1942. With his "red eagles" he fought in the North African campaign, and outside Tunis his Division attacked the enemy for the last time in North Africa. On May 12, 1945 the commander of all Axis forces in Africa, General von Arnim, surrendered to him.

Later he fought in Italy but just before Cassino he fell ill and was flown to the U.K. In October 1944 he returned to India and became chairman of an important frontier commission. In January 1945 he became G.O.C., Ceylon, and a little later took charge of 4th Corps in Burma, later becoming G.O.C., Lucknow District.

He was awarded the K.C.I.E. in the New Year Honours List.

As we go to Press we learn that General Tuker has been appointed Colonel of the 2nd King Edward VII's Own Gurkha Rifles in succession to General Sir Kenneth Wigram.

The Council

Lieut.-General Sir John G. des R. Swayne, K.C.B., C.B.E., late Chief of the General Staff in India, has relinquished his Presidency of the Institution on his departure for England to become Adjutant General of the Forces. Since his arrival in India nearly two years ago, General Swayne has been particularly interested in the growth and usefulness of this Institution to officers of the forces, on many occasions going out of his way to advise and suggest matters concerning policy. He will, we are confident, carry with him in his new sphere the best wishes of a host of friends in India.

Our new President, Lieut.-General Sir Arthur Smith, K.B.E., C.B., D.S.O., M.C., was until recently G.O.C.-in-C., Eastern Command. He was appointed Chief of the General Staff, India Command, in January last. He joined the Coldstream Guards in 1910 and in the Great War won the D.S.O., M.C., and the Croix de Guerre, being mentioned in despatches on five occasions.

During the recent war he was Chief of the General Staff in the Middle East from 1941 to 1942, was knighted in the latter year, and became G.O.C., London District. In 1944 he took over Command of the Persia-Iraq theatre. He was appointed G.O.C.-in-C. Eastern Command, in September, 1945.

Air Marshal M. Thomas, C.B.E., D.F.C., A.F.C., Air Officer Commanding-in-Chief, India, and Vice-President of the United Service Institution of India, has been succeeded by Air Marshal Sir Roderick Carr. Air Marshal Sir Roderick Carr was educated at Wellington College, New Zealand, served with the R.N.A.S. and the R.A.F. during the Great War, and after service in North Russia in 1919, became Chief of Air Staff to the Lithuanian Government in 1920. He was a member of Sir Ernest Shackleton's Antarctic Expedition of 1921.

Between the two wars he served in the U.K., the Middle East and the Far East, and at the beginning of the recent war commanded the Base of Advanced Air Striking Force of the R.A.F. in France. In 1940 he was A.O.C., Northern Ireland and from 1941—45 was A.O.C., Number 4 Group, Bomber Command. In 1945 he became Deputy Chief of Staff (Air) under General Eisenhower. From August 1945, he was Air Marshal Commanding, Base Air Forces, South East Asia Command.

Admiral J. H. Godfrey, C.B., another ex-officio member of the Council, has been succeeded in that capacity by Vice-Admiral Sir Geoffrey Miles, K.C.B., Flag Officer Commanding, R.I.N. Vice-Admiral Miles was formerly Deputy Director of the Staff College and at the outbreak of the late war, was Director of the Tactical School. He was Captain of H.M.S. Nelson for two years, being promoted to Rear-Admiral in 1941 and to Vice-Admiral in 1944. He was Naval member of the Military Mission to Moscow during 1941—43, and became Flag Officer Commanding, Western Mediterranean Fleet, in July, 1944.

Mr. A. D. Flux Dundas, who has assumed the appointment of Secretary, War Department, has accepted the invitation to serve in that capacity as exofficio member of the Council of the U.S.I. He entered the I.C.S. in 1922, was Political Agent, North Waziristan in 1928—31, Deputy Commissioner, Peshawar from 1934-36, Chief Secretary in the North-West Frontier Province from 1937 to 1941, and from 1941 to 1943 was Resident in Waziristan, becoming Revenue Commissioner in the N.-W.F.P. in 1943.

The appointment of Lieut.-General R. A. Savory as Adjutant General in India will have given great pleasure to his wide circle of friends throughout the Services in India. General Savory, who is an elected member of the Council of the U.S.I., and a member of the Executive Committee, until recently commanded the Persia-Iraq Command, and in December last, was appointed Adviser to the Commander-in-Chief, Middle East Forces in all matters concerning Indian troops stationed in the Middle East Command. His long connection with the Indian Army dates from the beginning of the Great War, when he joined the 14th K.G.O. Sikhs, (now 1/11 Sikh Regiment) which he was commanding in 1939.

Early in 1940 he went to Egypt as Commander of the 11th Indian Infantry Brigade, whose first "kill" was at Sidi Barrani when it captured Nibeiwa, the stronghold on which the success or failure of the campaign depended. For his part in the action, General Savory was awarded the D.S.O. Later he fought with his Brigade at Keren.

In October, 1941, he became G.O.C., troops in Eritrea and three months later was appointed to command the 23rd Indian Division on the Assam—Burma frontier during the confused period when the Japs drove north through Burma.

In June, 1943, he was transferred to G.H.Q. as Inspector (later Director) of Infantry. During the two years he held this post, there was considerable expansion in the Indian Army, and much of the success of the training and organization of the new infantry intake was due to his planning and skilful direction of policy.

In September, 1945, Gen. Savory was appointed to command the Persia and Iraq theatre.

New Members

The following new members have been elected to membership of the Institution, during the past three months:

Beresford -Peirse, Lt.-Genl. Sir Noel M. de la P., K.B.E., C.B., D.S.O.

Blood, Lieut. T. H.

Bowra, Colonel V.E., O.B.E.

Bradshaw, E. J., Esq.

Devisingh A. Ponwar, Captain.

Donovan, Major D. H., M.C.

Dundas, A. D. Flux, Esq., C.I.E., I.C.S.

Durrani, Lt. M. S. K.

Gupta, Captain S.D.

Hari Singh, Lieut.-Colonel.

Harrison, Colonel J. B.

Hibbert, Captain W. B.

Homburg, Major W. J., M.B.E., M.M.

Jenkins, Major J.

Johnstone, Major N. V.

Kamath, Lieut. M. M.

Khan, Lieut. A. R.

Myant, Major N.

Parab, Major G. S., M.C.

Pettigrew, Lieut.-Colonel H. R. C.

Rahmat Ullah Khan, Lieut.

Rashid Ahmad Khan, Major.

Rea, Major K. G.

Sheodan Singh, Captain.

Shallow, Lieut.-Colonel C. R.

Sharma, Major K. C.

Som-Dutt, Lieut.-Colonel D.

Thimayya, Brigadier K. S.

*Watt, Major S. A.

Wells, Major N. H. B.

Westmorland, Lieut.-Colonel, H. L., O.B.E.

*Wilson, Major A. J., M. C.

Other subscribing members who have enrolled during the past quarter include:

^{*} Life Member.

The Director, Historical Section (I), War Department.

P. M. C., Officers' Mess, 2 K. O. Y. L. I.

Admin. Comdt., 2 (U.P.) Bn., U.O.T.C., I.T.F.

P. M. C., O. T. S. Ahmednagar.

Education Officer, Ferozepore.

For gallantry and distinguished services

The following members of the Institution have been awarded the honours indicated for service in Italy during 1945:—

- C.B.—Major-General C. H. Boucher, C.B.E., D.S.O., I.A. (late 3 Gurkha Rifles).
- O.B.E.—Lieut.-Col. I. H. K. Chauvel, 6th Lancers; Lieut.-Col. N. G. Hunter, R.I.A.S.C.; Lieut.-Col. L. P. Lemarchand, 5th Royal Gurkha Rifles; Lieut.-Col. R. W. Peters, Central India Horse.

Among the awards to ex-Prisoners of War from the Far East for meritorious service during captivity are the following to two members of the Institution:—

M.B.E. (Military)—Major Kanwar Bahadur Singh, Kumaon Regiment, and Captain Apparanda Chegappa Iyappa, I.S.C.

Gold Medal Essay Competition

Entries for the 1945-46 Competition must reach the Secretary by June 30, 1946. The subject selected for the next Competition is: "Co-ordination and control in Peace and war of the forces of all services, British and Dominion, in the Indian Ocean and neighbouring territories."

The interdependence of the three Fighting Services, one upon another, was demonstrated time and again during the late war. The success achieved when the three have planned and operated with one object and under a unified direction has been remarkable. This has, however, tended to create a complicated system of command with large staffs.

Bearing in mind the necessity for the three Services to continue to train to operate as one whole, and the danger in peacetime of each retiring into its own watertight compartment, examine the possible ways of evolving from our own war experience a simplified system of command which will ensure the closest inter-service co-ordination for the Commonwealth forces in peace and in war.

A definition of the geographical scope has been left to the essayist to develop.

Full details of the rules governing the Competition will be found elsewherein this issue.

MacGregor Memorial Medal

Recommendations for the award of the MacGregor Memorial Medal should be submitted by May 1 of each year.

The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor, who founded the United Service Institution of India. It is awarded for the best military reconnaissance or journey of exploration of the year.

The awards are made in June, and are: (a) For officers, British or Indian, silver medal, and (b) for soldiers, British or Indian, a silver medal with Rs. 100 as gratuity. For especially valuable work, a gold medal may be awarded in place of one of the silver medals, whenever the administrators of the Fund deem it desirable. The Council may also award a special additional silver medal, without gratuity, to a soldier, for specially good work.

The award of the medals is made by His Excellency the Commander-in-Chief, India, as Vice-Patron, and the Council of the United Service Institution of India, who were appointed administrators of the Fund by the MacGregor Memorial Committee.

Eligibility for the award is open to: (a) Officers and other ranks of all forces of the British Commonwealth of Nations while serving with the India Establishment, or with South East Asia Command. (b) Officers and other ranks of the Royal Indian Navy, Indian Army, Royal Indian Air Force and of the Indian States Forces, wherever serving. (The term "Indian Army" includes the Indian Auxiliary and Territorial Forces, Frontier Militia, Levies, Military Police and Military Corps under local governments.)

Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal: but, in the event of two journeys being of equal value, the man who has incurred the greater risk will be considered to nave the greater claim to the award.

When the work of the year has either not been of sufficient value, or notice of it has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief in India to deserve it.

The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal. Replacements of the ribbon may be obtained on payment from the Secretary, United Service Institution of India, Simla.

Library

An extensive library is available for members of the Institution at the headquarters in Simla. Books may be loaned to members resident in India, and those borrowing works in person must enter particulars in the book provided. Members stationed outside Simla may receive books on application; they will be sent post-free by registered parcel post, and must be returned within two months, or immediately on recall. No more than three volumes may be issued at any one time. Reference books and works marked "Confidential" may not be removed from the library.

Members wishing to retain a work for more than two months should notify the Secretary to that effect. If, after the expiration of three weeks from the date of issue a book is wanted by another member, it will be recalled. Should a book not be returned within fourteen days of the date of recall, it must be paid for, the cost of lost or defaced books being refunded by the member to whom they were issued. Such volumes which have become out of print will be valued by the Executive Committee, the members being required to pay the cost so fixed.

The issue of a book to any member under the above rules implies the latter's agreement with the regulations.

Contributions to the Journal

Articles on matters of military, naval and air force interest are welcomed. They should not exceed 5,000 words in length and preferably should run to 3,000 words. Contributions should be type-written, double spacing, and in view of the paper shortage, may be typed on both sides, providing a moderately thick paper is used.

Contributors unable to submit articles already typed may send them in manuscript form, and arrangements will be made for them to be typed in Simla, the small charge being deducted from the contributor's fee. Payment is made on publication, at rates up to Rs. 150 according to the value of the contribution.

All articles dealing with operational subjects are submitted to the authoristies before publication, for security reasons. Contributions may, if the author desires, appear under a pseudonym; in such cases, the name of the author remains strictly confidential. The right to omit or amend any part of an article is reserved by the Executive Committee.

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of the

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GOLD MEDAL PRIZE ESSAY COMPETITION

The Council has selected the following subject for the Gold Medal Prize Essay Competition for 1947:

"MAN MANAGEMENT"

Entries are invited from all commissioned officers of His Majesty's Forces, from gazetted officers of the Civil Administration in India, and from officers of the Indian States Forces.

Essays, which should be typewritten (double spacing) and submitted in triplicate, must be received by the Secretary, United Service Institution of India, Simla, on or before June 30, 1947. In order that the anonymity of each candidate should be preserved, a motto should be written at the top of each entry. A sealed envelope, bearing on the outside the motto, and containing inside the name and address of the author of the essay, must accompany each entry.

Entries should not exceed fifteen pages (approx. 8,000 words) of the size and style of the Journal. Should any authority be quoted in the essay, the title of the work referred to should be given.

Three judges chosen by the Council will adjudicate. They may recommend a money award not exceeding Rs. 500, either in addition to, or in substitution of, the Gold Medal, and will submit their decision to the Council. The name of the successful candidate will be published in the October, 1947 issue of the Journal.

Copyright of all essays submitted will be reserved by the Council of the United Service Institution of India.

선생님 하셨습니다.		
1986년 1일		
'' 전문 경기 전문		



THE EIGHT CAMPAIGN STARS OF THE WAR, SHOWN IN ORDER OF WEARING. EACH STAR IS THE SAME EXCEPT FOR THE LETTERING. COLOURS OF THE RIBBONS ARE:

The 1939—45 star: Navy blue, red, and lightblue.
 The Atlantic Star: blue, white and sea green (shaded and watered).

3. THE AIR CREW EUROPE STAR: black, yellow, light blue, yellow and black.
4. THE AFRICA STAR: buff, dark blue, buff, red, buff, light blue and buff.
5. THE PACIFIC STAR: red, dark blue, green, yellow, green, light blue and red.

6. THE BURMA STAR: dark blue, orange, dark blue, red, dark blue, orange and dark blue.
7. THE ITALY STAR: red, white, green, white and red.
8. THE FRANCE AND GERMANY STAR: blue, white, red, white and blue.

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The views expressed in this Journal are in no sense official, and the opinions of contributors in their published articles are not necessarily those of the Council of the Institution

FIELD MARSHAL SIR CLAUDE AUCHINLECK, G.C.I.E., G.C.B., C.S.I., D.S.O., O.B.E., A.D.C.

It is twenty years since an Indian Army officer was promoted to the rank of Field Marshal; and in all our two hundred years of leadership in India there have only been twelve Indian Army Field Marshals—of whom Lord Napier of Magdala and Lord Roberts of Kandahar strictly speaking belonged to the British Service. The promotion of General Sir Claude Auchinleck to this supreme rank recognises not only his personal qualities as a soldier of outstanding merit, but also pays the highest possible compliment to the part played by the Indian Services in the defeat of Germany, Italy and Japan.

History will reveal in time how truly great have been his achievements. It will also prove him to have been singled out by Fate, in some of the darkest hours of the Second World War, to bear—and with supreme courage and great wisdom—as great a burden of responsibility as has ever been thrust on her Commanders by a purblind and unprepared Britain. His name will live long in the memory and in the hearts of fighting men in India, to most of whom he is personally known, and in whose service—as they well know—he has given all that man has to give.

He stands now in the perplexities of peace as he did in the crises of war, a rock in whom we may all have faith. We of the Indian Services are proud to count him as one of us, and no man could have

more heartfelt congratulations than those we offer him. Few of us, from the lowest to the highest ranks, have not been personally helped and inspired by him.

Many have risen to fame in the late war on the crest of the wave of success. "The Auk", our Auk, belongs to the elect few who throughout our history have helped to lead us out of the dark wood of our characteristic early disasters by steadfast courage and heroic decision in the field, by elimination of self-interest, and by understanding patience and forgiveness when beset by divided counsels and crippling handicaps. His name must be connected with our most perilous hours, through which only men of his calibre and foresight could have steered us.

In April, 1940, we see him at Narvik, just before the curtain falls on stricken Norway, extricating our seemingly doomed rearguard by hitting the triumphant Germans to the ropes. When German invasion appeared to be but a matter of hours after Dunkirk, he was in command of the troops barring the southern gates of England. From February, 1940 to early July, 1941 he was Commander-in-Chief in India, pressing on with the modernisation and expansion of her Services, to which he had already given much thought and assistance through the deliberations of the Auchinleck Modernisation Committee in 1938 and as a member of the subsequent Chatfield Committee immediately prior to the outbreak of the war.

In April, 1941, as the Axis hands reached eagerly for Iraq and the Persian Gulf—Britain's throat—he, together with India's Viceroy, Lord Linlithgow, was instrumental in moving just in time to forestall them, troops which India could ill spare—despite opposing counsels. After Dunkirk, this episode may well stand out as a turning point of the war, for very soon the oil of Persia and Iraq was to be our only supply. From July, 1941 to August, 1942 he was at grips with the growing menace to the Middle East, when British fortunes were at their lowest ebb. The storm clouds gathered in the Far East, and presently our crazy strategic structure in Malaya and Burma was to melt away before the Japanese onslaught, carrying with it reinforcements and material urgently needed for his task.

In the autumn of 1941 the astounding successes of the Germans in Southern Russia increased the responsibilities and anxieties of the C.-in-C. Middle East hour by hour. Yet, in November, 1941, calculating that there was time to launch an offensive in the West before having to turn to meet the growing menace from the north, General Auchinleck set out to destroy the enemy forces in Eastern Cyrenaica which had in the previous months been strengthened with formidable German armoured troops and mechanised infantry.

His intervention in the battle, when it seemed all but lost, the raising of the siege of Tobruk, and the retreat of Rommel to the border of Tripolitania were outstanding episodes in the long struggle in North Africa. Before the enemy had been expelled from Cyrenaica, however, Japan attacked, and troops and air forces from and intended for the Middle East were diverted to the Far East, thus snatching the chance of decisive success and necessitating retreat to the Gazala position.

Only those who shared the responsibility can understand the anxieties that now piled up. The Fleet in the Eastern Mediterranean existed in name alone, after the bloody battle of Crete and the torpedoing of "Queen Elizabeth" and "Valiant" in Alexandria harbour. The Merchant Navy had to run the terrible gauntlet of the convoys to Malta, each one an epic of sustained courage and devotion. The Germans had reached the Caucasus, and only Stalingrad, where the defenders were slowly losing ground, stood between them and the decisive strategical prizes of the Middle East. As weakness grew and dangers increased from all sides, Rommel attacked with his now formidable superiority in tank efficiency, which constituted the dominant factor on North African battlefields, when air forces were inadequate to intervene tactically in sufficient strength and frequency.

The sequel—the loss of Tobruk, the invasion of Egypt, the assumption by the C.-in-C. of personal command of the Eighth Army, and the stopping of Rommel at El Alamein—is too well-known to enlarge upon in this short sketch of the new Field Marshal's career. El Alamein was fought by him not only with the object of repulsing the enemy, but of launching an immediate counter-offensive. Syria, Iraq and Persia had to be stripped bare to enable him to stop the enemy at El Alamein. Yet, in the midst of this decisive struggle General Auchinleck planned for a deliberate offensive as soon as it could be made possible by the promised arrival of tanks and antitank guns more on a par with those of the enemy, and the heavy bomber aircraft and fresh divisions long needed, and now at last on their way to Egypt.

For a year, until July, 1943, when he was re-appointed Commander-in-Chief in India in place of General Wavell, who became Viceroy, General Auchinleck remained unemployed. Those with human understanding will appreciate what this meant to him. It is in misfortune that man proves himself.

Now began perhaps the greatest task of his career: the expansion and training of the forces in India, amounting eventually to some two and a half million men; and the responsibility and genius of organising the vast base in India for the coming offensive against

Japan. It will be remembered that India suffered from extreme industrial backwardness for such a gigantic project; and that her harbours, communications, airfields and technicians were pitifully inadequate for modern war. We in India know how great has been his achievement.

And now, in these troubled times that have followed on the end of the war—to the successful conclusion of which he contributed so great a share—he stands as resolute, imperturbable and tolerant as ever, sharing the confidence and regard of all shades of Indian and British opinion. In him great trust is placed, earned by the example he has set of unselfish devotion to duty. This and his natural kind-liness, tolerance and humanity have earned him the deep personal regard of all the Services of which he is the Commander-in-Chief, and for whose fair name and welfare he has lived.

Field Marshal Auchinleck's forty-three years of service to India is a matter of the greatest pride to the sailors, soldiers and airmen of India and to all who have served under him. India can count herself fortunate in this, her hour of destiny, to have his broad shoulders, deep wisdom and statesmanship to help carry her heavy burdens.

MATTERS OF MOMENT

GOVERNMENTS are now publicity-minded. By advertising in the public Press, by posters and hoardings they seek the co-operation of the public with a forcefulness which equals any business determined to increase its sales. But even intensive advertising must have public

support to be fully effective, and it is here that officers in the Indian Army can help in one Government cam-Matter for paign—that of endeavouring to persuade young men of Officers the right type to apply for regular commissions. By discussing an officer's life with their friends, by dispelling doubts some parents might have of an officer's work, and by seizing every opportunity of emphasising the attractions of a Service career to parent friends officers will be doing fine pioneering work. "Personal publicity" counts, and as the third interim short course at the Indian Military Academy in Dehra Dun begins in January next, time is short. Qualifications are that candidates must be between 18 and 21; they must have matriculated, passed the Senior Cambridge with not less than two credits, or have secured the Indian Army Special Certificate. The "drill" is simple. Having secured application forms from Brigade or Area headquarters, from recruiting officers or from a University or College, a candidate

is called up by the Commanding Officer of the area for a preliminary interview; if the candidate is successful, the form must be sent to the Directorate of Selection of Personnel, G.H.Q., Meerut, before September 30, and successful candidates will later be called before a Services Selection Board and a Medical Board, after which those who are considered suitable as potential officers will attend a two years' course at the Academy in Dehra Dun.

It is much harder to be a good officer in peace than in wartime. This may at first sight appear paradoxical, but it is a fact that higher standards

are demanded from regular officers who have the task of No building up the efficiency of an army than from the Lowering of temporary officers a country has to appoint to help to Standards lead it in war. If, therefore, India is to maintain its essential minimum of efficiency in peace to enable the Army to expand in war, the highest possible standard for regular officers must be adhered to. As Field Marshal Auchinleck recently said in addressing the Council of State, that India can eventually produce sufficient Indians of the right type to provide all the officers likely to be needed to lead the Armed Forces of India in the future cannot be doubted. The deeds and prowess in the late war of that band of pre-war Indian regular officers, numbering less than 600, proved it. But civilians must realise that a good junior leader in battle may not make a good officer in peacetime. Moreover, while much may be said for young leaders in war possessing fire and dash and enthusiasm, those qualities need to be balanced by knowledge of men and military lore, which knowledge can only be acquired by long experience. Without that knowledge, from which springs the power to judge men and events soberly and in their right perspective, very few good officers can emerge.

Some pertinent facts on this problem of Indian Army officers were revealed by the Commander-in-Chief at the same meeting of the Council Requirements of State, when he said that a tentative estimate of the future requirements of the Indian Army showed that Post-War about 9,000 regular officers would be needed. He hoped Indian Army that about 1,000 would be obtained from the I.E.C.Os who had applied for regular commissions; there would be about 3,000 prewar regular officers, British and Indian, left in the Army; a special class of officer recruited from V.C.Os and N.C.Os of long service, set up to fill certain specialised appointments, would yield about 1,000; and by April next year it was hoped to get about 100 Indian officers from the

new post-war course at the Indian Military Academy. Those sources would thus yield about 5,100 officers of all ranks, Indian and British, against the estimated future need of over 9,000. To make up the deficit, said His Excellency, we must depend mainly on Indian candidates who volunteer for regular cadetships at the Military Academy, though even if sufficient candidates of required qualifications come forward, they could not all be accepted at once because it would completely upset the age and service balance of the officer cadre. What was the position at the second post-war course being held at the I.M.A. in Dehra Dun? Field Marshal Auchinleck said that for the first course 300 vacancies were offered; 1,236 applications were received, of which 126 were found suitable. For the second course, which begins in August 1946, 450 candidates are required and so far about 2,200 have applied. When the new National War Academy comes into being it is hoped to produce 500 or 600 officers annually for all three Services, but that cannot be for some years.

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Meantime, said His Excellency, we must have recourse to temporary expedients. First is the secondment of British Officers from the British

Army to fill the gap until there are enough Indian officers, trained and experienced, to take over. No more Expedients

British officers are to be appointed permanently to the Indian Army; they would in future be attached for a

short specified tour, but this does not apply to the existing regular British officers of the Indian Army who belong to it permanently. The second expedient would be the retention in the Service of E.C.Os, British and Indian, who though not wishing to apply for regular commissions, may be willing to extend their service for a year or two. The third expedient is the granting of short-service commissions to Indians already serving. In the closing stage of his speech, which was given on a resolution moved by Pandit Kunzru "that a time limit be laid down for the nationalisation of the Indian Army," Field Marshal Auchinleck said: "The Honourable Mover suggests that the Indian Army should be nationalised in ten years from now, by which I am sure he means that by that time all British officers from the highest to the lowest shall be replaced by Indian officers. It may be possible that in some branches of the Army this target could be achieved, but I think it would be highly dangerous and most undesirable to make a categorical declaration to this effect. It would be even more dangerous and unreal, taking everything into consideration, to apply such a declaration to the whole Army. There are many imponderable and unknown elements in the various factors which affect the solution of the problem, and make it impossible to specify an exact period for the achievement of the complete nationalisation of the officer cadre of the Indian Army."

Some details of the "short-term" commissions now available in the Indian Defence Services for I.E.C.Os may perhaps be quoted here with Such commissions are available for three advantage. "Short-Service" years for those over 35 years of age and for five years Commissions for those under 35, with a gratuity at the end of the con-There may be opportunities to extend these tract. periods when requirements are more definitely known. These commissions are restricted to British subjects of Indian domicile or descent or subjects of Indian States, the requirements being physical fitness, proficiency in English, and certain educational qualifications. Pay, promotion and terms of service will be the same as for regular I.C.Os of the Indian Army. Both this scheme and that for the post-war course at the I.M.A. are the first fruits of the nationalisation of the Indian Army. The change-over is in progress, and more and more officers of the right type will be required. Every officer who does his level best personally to make them more widely known can feel that he is helping in no small degree to fashion the future success of an Army whose traditions demand—and will ever demand—only the highest standards.

THE PRESS in India, limited as they are for space, has, we feel, been unable to fasten adequate attention on the efforts the Army has made towards self-sufficiency in its food supplies. It is, however, a remarkable story, and one that deserves to be more widely known, if only to impress on the peoples of India that its Army is far The Army from being a drain on the country's resources. A "Grow Food Resources More Food" campaign is no new feature in Indian Army and life, for during the war the present Quatermaster General, as G.O.C. Central Command, led the way by organising one of the biggest food-producing organisations in India. The practice spread, and as will be seen from an article in this issue, there was later set up an excellent farming experiment to feed the Fourteenth Army. Incidentally, as the writer of that article points out, there may be a commercial future for one of their wares—that of producing kippers. It was but one instance of the versatility shown by these soldier-farmers, and there and in other parts of India similar enterprise brought its reward in the shape of fresh vegetables and other foods, saving as it did much space on railways and roads for other military stores.

Now, instead of the war against Japan, the war is on against famine, and, as General Durnford, now Q.M.G., announced recently, the results of all the various economies, cold storage placed at the disposal of the Civilian Government, and the amount of cattle killed, as well as the enormous quantities of food grown, show that the Army is contributing much to

India's anti-famine drive. In one month nearly 1000 tons of dal, over 600 tons of atta, over 250 tons of sugar and 83 tons of flour were saved by the reduction of the basic ration of both Indian and British troops. Later 3000 tons of flour and more than 5000 tons of sugar were surrendered to the Food Department. These figures are a measure of the Army's realistic outlook on India's food shortage.

* * *

Because we fear the facts are not sufficiently widely known we venture to record the work of smaller formations. Troops in the Bombay.

Presidency now produce each month nearly 80,000 lbs. of What fresh pork, 24,000 lbs. of fresh vegetables, 2,000 lbs. of Has Been poultry, 24,000 eggs and 200 lbs. of fresh fruit. Wells in Done Poona and Kirkee, closed on account of the mosquito menace, were opened and tested to ascertain their suitability for irrigation purposes before the monsoon broke. In Northern Command troops are helping to cultivate 1,000 acres of land between Kohat and Hangu. and tractors, harrows, motor graders and transport have been supplied. The Baluch Regimental Centre produced over 200,000 lbs. of vegetables during the eleven months up to February last; the Rajputana Rifles Regimental Centre at Delhi Cantonments is doing good work in teaching better farming methods—and so successfully that farmers in a nearby village inquired as to how these Army farmers could procure yields of 20 maunds of baira per acre as compared with their 10 maunds. At Aurangabad a Training Centre produces nearly 7,000 lbs. of vegetables, 2,000 lbs. of fruit and 1,000 eggs monthly. A new plough has been made by an I.E.M.E. workshop at Risalpur from broken-down tanks; mounted on a threewheeled chassis, and drawn by a jeep, the plough has three shares. During the next six months a large proportion of the vegetables produced for Eastern Command should be available for the civilian population. And a military dairy farm at Lahore is now producing canned buffalo milk. Those results do not represent the whole effort, but they suffice to show that the Army's drive is a practical one. Behind it all is a real desire to help the country, for to achieve these results there has been much organisation, much preparation and much hard work. It deserves to be applauded, not least by those outside the Army who are never lacking in criticising "what the other fellow is doing". In this particular case the critics can rest assured that the Army is not only doing its best; it is achieving results which will assuredly benefit the civilian population in no small degree.

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THE EVENTUAL shape of Britain's post-war forces is not yet decided upon—indeed the effects cannot yet be assessed of the implementation of Britain's obligations under the United Nations Charter "to provide forces, facilities and assistance to be on call by the Security Council

and to be at the prescribed state of readiness and in certain general locations". At the end of this year, how-Britain's Post-war ever, Britain's defence forces will number 1,000,000 train-Forces ed men and 100.000 women, while another 100,000 men will be under training. The total of those forces will be about double the number before 1939. The world-wide extent of Britain's commitments are seldom fully appreciated; she has to provide forces in Germany to assist in ensuring the execution of the surrender terms; there is a small contingent forming part of the British Commonwealth Occupation forces in Japan; there are forces sharing in the occupation of Austria, others (with American troops) helping to maintain law and order in Venzia Guilia, which will end when the final peace treaty with Italy is signed. In Greece, too, some British forces remain to assist the Greek nation in its recovery. In Palestine British troops are present to help carry out their country's responsibilities.

Coming further East are British forces in India, and in South East Asia, where they are dealing with the liquidation of Japanese occupation.

Clearing the seas of mines, storing and guarding dumps And The and Lease-Lend material are two other phases of work Government's which call for British soldiers. According to a White Policy Paper issued in London recently the four principles which the Government proposes to follow are: (a) concentration on research, since the present scientific technical progress is so rapid that safety lies far more in the maintenance of an adequate organisation for pure and applied research than on building upon stocks of obsolescent material; limited introduction of the most modern equipment, e.g., jet-propelled aircraft; maximum use of the accumulated stocks; and maintenance of a reasonable war potential. The White Paper made it clear that the British Government was determined to maintain, in collaboration with the Dominions and India, British Armed forces strong enough to meet all possible commitments, while pursuing a research programme that will ensure those forces being supplied with the most up-to-date equipment available.

THE FOURTH CHRISTMAS

By LIEUT.-COLONEL J. WILSON STEPHENS

1939. ".....so why not come up and spend Christmas with us?"

I put the letter down and glanced through the open door of my sittingroom. Bengal. Seconded from my regiment, I was here in the capacity of an Additional Superintendent of Police. The station was small, and I was the only European inhabitant. I had been there for eight months.

I looked at the scene outside. An overgrown garden; tropical flowers and trees. Birds and butterflies of startling hues made points and dashes of colour as they darted from one place to another. Overhead the sky was a brilliant blue verging into molten gold around the sun. The humidity was somewhere in the nineties and—I sweated.

The letter was from a brother officer of my regiment at present commanding the Training Company in Shillong. Only a twenty-four hour journey from my station. Shillong—according to the railway posters the Scotland of India—4,500 feet up in the Khassia hills of Assam, would be cold now and filling with visitors for the Christmas holidays. Should I go? There would be a real Christmas up there, not the forced business it was apt to be down here in the plains.

I took two telegram forms and wrote. One went to Police Headquarters in Calcutta asking for a week's Christmas leave, the other to Shillong saying:— "Many thanks. With you on twenty-third." At once life took on a rosier hue. Already I had that subdued feeling of excitement that goes with thoughts of leave.

A fortnight later I was on the platform awaiting the Calcutta Mail, due at 21.30 hrs. Luggage by my side I waited as my bearer fussed with tickets and coolies. The train arrived and, my bedding laid out in the compartment, I gave myself up to thoughts of things to come.

Morning found us at Armingaon. Here the train journey ended and we had to cross the Brahmaputra. Breakfast was served on the river steamer and finished as we reached the far shore. Onwards the journey was by car; sixty-three miles of winding, twisting, climbing road. I had missed the first service and had to wait until after lunch. Never mind, I was on leave, and anticipation was half the fun.

We started off in convoy; some dozen vehicles full of the business crowd from Calcutta bringing with them their golf clubs, tennis rackets, and much generosity. Up we went, at first through thick jungle; monkeys swung from branch to branch. It was hot, and we were in shorts and open-neck shirts. Over the arm we carried an overcoat or a rug; pleasant reminder of the coming evening.

As far as the half-way-halt at Nang Po the scenery altered little, though latterly it became much less tropical. I settled myself down for a nap, my thoughts on log fires, warm blankets, friends and conversation. I had not spoken my own language now for many weeks and I was hungry for "soldier talk."

Hullo! Here we were at Nang Po. Much cooler already, in fact there was a distinct nip in the air. Tea and toast at the little hotel and I looked at my fellow travellers. These might have been holidaying in England as, owing to the war, many had brought their children out to India so that whole families were represented; in normal times an unusual sight. An air of holiday was about. Tea finished, I took the opportunity to change into grey flannels against the coming cold.

On we went, and now the scenery changed with every mile. Jungle gave place to delicate bamboo. In the distance I could see the hills, the mist swirling around their peaks. It was getting towards dusk now. The bamboos had gone, their places taken by pines, themselves redolent of the season, their graceful fingers pointing to the greying skies. There was a look of winter such as is never to be found in the plains. A thrill went through me. This was like home; felt like it too. I struggled into my overcoat for the first time for eighteen months.

Lights ahead, and soon we were amongst them. Houses and shops looked to my excited eyes like fairyland. I saw the cheerful Mongol faces of the hillmen and their women-folk, the latter dressed in Welsh cloaks, descendants of the original ones given them by the Welsh Mission still working in those parts. Easy to look at, these Khassia girls.

We stopped at the terminus and alighted. I could see my breath condense in the frosty air. My bearer, complete with coolies and baggage, joined me.

"Hullo, Jack!". I heard Richard's voice.

"Hullo, old man. This is grand." And off we went to his waiting car. There would be plenty of time to talk and plenty to talk about; for the time being we confined ourselves to trivialities. At the bungalow Joan, my hostess, was there to greet us. Enjoying every moment to the full, I entered for the first time for nearly two years a room with a fire.

A whisky and soda drunk comfortably in front of the fire and a feeling of wellbeing and relaxation overcame me. However, I was not allowed to sit idle. There was to be a 'before-supper-dance' at the Club where the band of sister Gurkha regiment would be playing. I was packed off to change into a dinner jacket. A hot bath—what heaven! A change into thick clothes in front of my bedroom fire—what luxury! and I was ready.

At the Club there was the meeting with old friends, the sight of cheerful faces, and a word with the men in rifle green and black; the band of theth Gurkha Rifles. All joy to one who had been away from such things for a long time.

Bed at last, and the touch of good white linen and soft blankets; the flicker of the fire for company. I was well content.

Christmas Eve.—We spent the morning on the golf course. The Shillong links are famous; this morning they were crowded. There I met many whom I had not seen for years; officers who had returned from retirement on the outbreak of war. I renewed acquaintance with men of both my own regiment and of the two other Gurkha regiments whose depots were at Shillong. All had been sent there to await posting orders.

As yet the war seemed very far away, though the stories that these men had to tell of submarines and depth charges on the way out made it seem more real. Our armies were still lined up in France, and the collapse had not begun.

December 25th.—I awoke to a real Christmas morning. No snow it was true, but the sky was overcast and held the promise. Cold—the right type of cold; crisp and dry. From my bedroom window the view was satisfying. Situated on a plateau, Shillong's houses were, for the most part, dotted about on little hill-tops and built in a style that went naturally with their pinewood surroundings. This morning it had the look of a continental town; Swiss, if I allowed my imagination full rein.

"Merry Christmas, Jack." Richard came into the room, and together we went into breakfast. Presents were exchanged.

To-day we had a programme to fulfil. Gifts had to be distributed to the servants, all of whom expected something on our "big day." After Church, Richard and I went off to the Mess, where lived the officers of the two resident battalions and the training companies. Here was a great show. Annually, on Christmas Day, the Gurkha Officers (Viceroy Commissioned) came to the Mess to drink our good health. They were in mufti; those of my regiment in grey flannels, rifle green double-breasted coats with regimental buttons. All wore the Gurkha Brigade tie.

"Hullo, Subedar Sahib, Kusto chha, how are you? Haven't seen you for ages. Not since the Fort Sandeman days. Getting fat, you know." The conversation flowed as did the beer drunk from shining silver tankards. The logs blazed in the great fireplaces. Trophies and portraits on the panelled walls made a fitting setting to the cheerful scene. Outside the Pipers marched up and down.

At lunch time the Gurkha Officers made their farewells; Richard and I stayed for a glass of sherry and a word with old friends. The talk went to the war. So far, regimentally, we were unaffected. The enormous expansion into wartime battalions had not yet begun. We were all regular soldiers; the Gurkha Officers still at their normal age, not yet the youngsters who, later, were to take so ably the responsibility on their shoulders. To all intents and purposes we were still a peacetime organization.

Back to the bungalow for lunch; afterwards a typical English Sunday afternoon in front of the fire; a little drowsy; a little over-eaten; but very content.

That evening we were due at Church. I had been roped in to sing in the carol choir and Joan and Richard came to support me. The Church was thoroughly English, stone built and homely. Windows and pews bore silent witness to departed officers of one or another of the Gurkha regiments. Here was the true Christmas atmosphere captured. The carols brought back happy memories of other days, and my thoughts took the familiar turn to home and family. The war was temporarily in the background.

Outside, overcoats on, we talked to friends for a while before returning home. "Good-night, padre. Happy Christmas to you" and we were on our way.

We were to dine with the Commissioner. Dinner was in the traditional style; turkey; plum pudding with charms and three-penny bits; mince pies; crackers with the nuts and wine. All pure gold and a part of one's life which, child or grown up, I at any rate look forward to with undiminished pleasure.

Games afterwards until it was time to go. We said our good-byes. Home, and a final whisky and soda before bed. Joan went to bed while Richard and I talked shop until, with a yawn, I bade him good-night.

Christmas 1939. Yes, it was good and I enjoyed every moment of it. My leave was ended.

"Au 'voir, Richard. I'll be seeing you soon I expect. Hope it'll be back with the battalion: best place to be in a war. Drop me a line, old boy, from time to time. It's been terrific. I wonder where we shall be next Christmas?" And as my car wound its way down the hillside I said to myself—I wonder?

1940.-

**COMPANY'S turn, Jack. You'll have to relieve Khassadar Picket tomorrow morning. Sorry! Christmas Day, I know. I'll leave the arrangements to you. O.K.?" The Commanding Officer of my battalion was giving his instructions for the weekly relief of camp pickets outside our sector of the perimeter at Tauda China, seven miles from Razmak in Waziristan.

Razmak Brigade (Razcol) was out on column. There had been local trouble, and the tribesmen were collecting. The Fakir of Ipi was known to have been in the vicinity, and it had become necessary to send out troops to show the flag. That we had been here, unable to move, since December 7 showed that this was the case.

We had left Razmak at first light on that date. By 11.00 hours we had run into trouble. Rounding the corner of the rock massif, Pakalita Sar, the leading troops had been heavily fired upon. That night two of the camp pickets had been rushed. One had been annihilated, totalling some sixty-three killed, the other, stoutly led by a Subedar who in due course received the M.C., had stood its ground until relieved the following morning.

Since then we had been immobilised at Tauda China camp waiting for reinforcements from below. Tochi Column (Tocol) and the...stBrigade were due up now at any moment. Then we should push on to Ladha. Rumour had it that we were opposed by a lashkar of some 6,000 Mahsuds. There were probably less than half that number. However, for the time being we sat, and the tribesmen were having their fill of sniping practice. I went to give a warning order to my Company Subedar to be ready for tomorrow's work.

Christmas Eve. Up here at 6,000 ft. we get a real winter and the night was very cold. The sky gave every indication of snow and there was a hush over the land. From the direction of the Mess came the cheerful sound of conversation as I hurried towards it. I was dressed in a poshteen—the long sheep-skin coat of the Frontier—over my battle-dress; on my head a Balaclava helmet, while my legs were encased in long Gilgit boots. Jove! it was cold.

I brushed aside the blanket which served as a screen to the entrance and went into the warmth and comfort. The Mess was built on the lines of a dugout, roofed over with a tent, and dug down. A stone wall built around and outside sheltered the inmates from intermittent sniping. Logs blazed cheerfully in the brick fireplace.

The officers, still for the most part regulars, were seated on chairs and sofas, the latter made of sandbags. Tonight, being Christmas Eve, the Mess was full of visitors; for we lived on top of one another in camp. A British battalion; two Indian; and my own Gurkhas; as well as Gunners of the Mountain Artillery; Sappers and others, and it was our custom to visit one another after the day's work—pub crawl if you will! I shouted for a 'whisky mac'' against the cold and found myself a seat.

War! Here, although we were fighting, we did not consider that it was taking part in the real thing, though we realised that it was work that had to be done. To the regular officer who, on and off for years, had been engaged in frontier warfare, there was nothing to suggest that he was helping the war effort. However, sooner or later, we knew, our turn would come and we should be sent overseas.

For myself, I was happy to be back with the regiment. After two years in the heat of Bengal I had come back homesick for the North. To make sure that I should stay with the battalion I had committed a military crime. Given a vacancy on a War Course at the Staff College, I had wangled out of it, thus, from the point of view of the highclimbers, damning myself for life. Now, I told myself, I was sure to be left where I was. For the time being I was quite happy here on the Frontier. Life was abundantly full from my point of view.

Dinner over, we talked for a while. Outside, the occasional sniper tried his luck, the "tock dong" of the bullet crisp and clear in the frosty air. The officer of the day went out to inspect our part of the perimeter, visit the posts and inlaying picket. I went to my bed. My forty-pounder tent, dug well down so that I could stand in it and still be underground, was comfortable and snug. I was soon asleep.

I awoke to something new in the air. What was it? The light seemed odd and there was a kind of diffused radiance in the tent. The flap opened and, with much hissing, my batman entered with the morning tea. "Snow" he said. "Lots of it." So that was it. Lifting the flap I looked outside. Everything was dead white—for the sun was not yet up. Very seasonable, I said to myself. But by Jove it was cold. As I washed outside my tent in the chilly air the remarks of my brother officers came up to me from their dugouts.

"Morning, Jack. Merry Christmas. Looks lovely out there!" Hugo Wilson, my half-section, told me at length of the comfort of his early morning bed; enlarged on the beauty of a het cup of tea taken at leisure, while the smoke of an expensive brand of Turkish eigarette curled up and out from his tent door. I threw a handful of soft snow at the speaker and, to the accompaniment of earblistering oaths, dived back into my tent to dress.

Early breakfast over, I assembled my platoon commanders under cover of the perimeter wall facing the picket we were to relieve and gave my orders. These were simple. A covering party on the edge of the big nullah and, this in position, the rest would move to our objective on the high ridge—the Marai Narai in four successive waves. The position attained, the mules, stores and ammunition would follow. "Any questions? Very well, we start in twenty minutes from now."

In camp it would be a holiday except for essential duties and fatigues. I walked across to the British unit and exchanged compliments of the season with the C.O. and his Adjutant, who were stamping their feet outside their Mess.

"Just off to relieve Khassadar Picket," I said, "Damn nuisance on Christmas Day. Still, I'll be back in time for a drink before lunch. Hope to see you in our Mess, sir." And I went off to strap on my pistol.

A signal lamp winked from the picket and was answered by ours on the perimeter wall. All O. K. up here, it reported, and I told the signaller to say that we were about to start.

"Covering party in position, Sahib."

"Thanks, Subedar Sahib. Let the first wave go off."

I watched them as they moved off in extended line over the snow. Unlikely we should meet any opposition this morning. Too cold. The tribesmen would be in their flea-infested caves. Maybe there would be the odd sniper though. It wouldn't do to take any chances.

Company headquarters moved with the second wave, and we were soon across the open and down into the river bed. There was a stream half-way across, frozen now, but not strong enough to take our weight, and we splashed

through the icy water.

Then the ascent. Steep, and covered with holly bushes the height of a man, the climb soon warmed us up and set the blood pounding in our veins. I disliked these bushes. Too often they hid the burly Mahsud, long knife in hand. Thoughts of "Ghazi rushes" flitted through my head; but there was little likelihood of such horrors this morning.

Here we were at the top. The Jemadar commanding the picket came out

to greet me.

"Any news Jemadar Sahib?" I asked.

"Nothing much. There's been some sniping from over there." He pointed to the ridge beyond which we were standing. "I think we got one of them, Shib."

"Tock-dong"—a bullet whistled passed my ear. We ducked behind cover; you cannot afford to take chances with the "Finest Umpires in the world." A burst of light-machine-gun fire from the picket, the rat-tat-tat echoing from

the mountain sides, and all was peaceful again.

While the business of relief was in progress I sat down and looked at the scene spread out before me. It was magnificent. Below me, the camp was, a hive of activity. Smoke rose from the cook-house fires. Clear in the thin air came the sound of a Christmas hymn sung by many voices, for the padre had arrived in an armoured car from Razmak and was taking morning service. Men and animals appeared as through the reverse end of a telescope, distinct and sharp-cut, in miniature.

Beyond and on all sides were the tall, snow-covered mountains. To my left, the many towered village of Makin, lately known to have sheltered Ipi. To the right in the valley lay Marobi and the tomb of the Mullah Powindah, the Mad Mullah—of sacred memory. The wild countryside, fit habitation for the warlike Mahsud, presented a memorable spectacle. In the dim distance, screened by the spur of Pakilita Sar, the smoke of Razmak rose lazily in the still air. Close to me the scarlet splash of a robin gave the authentic touch to the

scene.

My thoughts turned to last year in Shillong. The war was over a year old now. Here we were still almost unaffected. True, some units had gone to the Middle East, but that was about all. Richard and Joan were still in Shillong, the former full of grumbles, and here was I where I wanted to be, with the battalion. Normally, in peace time, the Gurkha regiment consists of two battalions. Now we had expanded to three and soon, it was rumoured, we should have to find a fourth. A fine effort for Nepal, but it played havoc with the battalion. Already promotion was the order of the day and men who, in peace time, would still be riflemen were wearing the three stripes of a Havildar. I myself sported a Major's crown four years before my time. Well, it had to be done, and that the men would do their stuff there was no question. But it seemed to me to be asking a lot.

I turned to look at the post. The handing and taking over was completed and we were ready to move back. 11.00 hours, good! I should be in time for the Gurkha officers visit to the Mess.

"O.K. Subedar Sahib-Moving."

The Mess when I arrived there was full. The tent flies had been thrown back and the sun was warm and comforting. Outside and in there were people. The Gurkha Officers, beer in hand, were wishing us luck; the officers from the British battalion joined in the conversation and did their best to make themselves understood. A grand gathering, heartening somehow. There is an atmosphere on the Frontier that is to be found nowhere else. Everyone knows everyone else, and there is a great feeling of comradeship; a certainty that you will never be left in the cold.

I walked in and made pointed remarks about officers who had at least earned their beer as opposed to tea-swilling, bed-lying idlers who sat about drinking at all hours of the morning and doing their betters out of a seat. I was told to drink my beer and shut up.

Evening. Hugo Wilson and I began on the dinner. Both of us fancied ourselves as cooks, and we were going to give the Mess a treat. I did the prawn cocktail and the soup while he dealt with a complicated dish of fish and wine sauce. The cook, with looks of disgust at our efforts, attended to the turkey.

At dinner we had two guests; unattached officers from Brigade Headquarters, Gurkhas themselves. The King Emperor's health was drunk and a toast to absent friends. Conversation became general. This, as usual, was about the war and the possibilities of getting overseas. Already an officer from here and there had gone off on some job or other connected with war formations. Surely, we said, our turn as a battalion would come.

"Bed, boys" I yawned, feeling full and content. Whatever happened now I must surely stay with the battalion; its fortunes would be mine, and that was good enough for me.

The blanket over the Mess door billowed and a Gurkha signaller debouched into our midst with a message for the C.O.

"Hullo! W/T message from Northern Command?" The C.O. looked at it and passed it to me without comment.

"......the following officers will report forthwith to—Headquarters to take over appointments as Staff Captains to war brigades...." Followed a list of names, mine amongst them.

Damn! A shadow passed over my sense of wellbeing. Surely there was some mistake? Surely I had cut my staff throat by not going to the "Forcing House?" It wasn't that I didn't want to go to the war. I wanted to go with the battalion.

"Lucky man", was the general comment when I read out the news. "It means you'll be off soon. You've got a start on us", and so on.

I could not altogether share their feelings. Only recently returned, it came hard to have to go off again. It meant in all probability that I should not see the battalion for the duration. However, there it was. I should get to the war anyway. That was the way to look at it, and I began to cheer up.

Boxing Day saw me climbing into an armoured car on my way to Razmak and the South.

"Good-bye, sir". I shook the C.O. by the hand.

"Good luck to you, Subedar Sahib. To you all. Let's hope we shall meet somwhere out there. Good luck. Good luck. I wonder where we shall all be next Christmas?"

The steel door clanged to, the car moved off, and my driver, a young officer of the Indian Armoured Corps echoed—I wonder?"

1941.—

66 BOLO speaking to GOFU—Yes—BOLO 2 this end. What's that? Oh! it's you, Bill is it? Jack this end. What? The old man will be coming here tomorrow? O.K. Yes. We're settled in now. Situation much as it was. One battalion at the bridge, the other about two miles up the main road. You know the rest. No. Air quieting down a bit. The 10lst got hell all yesterday and last night, poor devils. All well your end? Good. Well, bye, bye, Bill." I put down the receiver of the field telephone and shouted for a Motor Contact Officer.

"Go to the 101st and find out how things are going. Come back as soon as you can. The Brigadier wants a full report on yesterday's bombing. Understand? Right. Get moving."

Christmas Eve, 1941. It was five o'clock in the morning, and we had been up all night, on the move from one position to another. I seemed to have been awake for days. Let me see? I had had no sleep the previous night nor the one before that so far as I could remember, which, I had to admit to myself, wasn't very far.

Since December 8 life had been something of a nightmare. No one, least of all the men, had had time to rest or get a change of clothes. I glanced at my filthy shorts, boots and hose-tops. Turning to the duty clerk I told him to warn me if the Brigadier returned or I was wanted on the 'phone. "I shall be under that tree," I said. "Very well, sir," he replied, and continued his work on the "battle board" which he was getting up to date.

I strolled off and sat down. Yes, December 8. We had not thought then that it was going to be like this. My Brigade, all Gurkhas, originally part of a force intended for the Western Desert, was side-tracked at the last minute and sent to Malaya. We had arrived in September. To begin with the Japanese menace had not been taken very seriously; betting had been even, some saying they would never come, others that if they did it would not be before the dry season in March.

Then, late in November, the tempo had changed. Something was going to happen. On the morning of the 8th I had been at Sungei Patani in my capacity as Staff Captain to the Brigade. There I had seen the Jap planes drop their load of bombs on the aerodrome. The war was on. Since then it had been a series of retreats, and we were not the full strength Brigade we had started out.

At Jitra the 101st had taken a bad knock, officers and men. In Brigade headquarters the Signal Officer had been killed. At Gurun the Brigade Major had followed; gallantly leading troops into action when headquarters had been surrounded, he had met his end. Since then I had stepped into his shoes and now, after fifteen days of almost continuous rearguard fighting through thick jungle and rubber plantations, we in position in front of and to the north of Ipoh, the

town I had left on December 7 and at which the Brigade had been stationed up to the outbreak of hostilities.

A retreat, never pleasant, becomes less so when you are outnumbered, have no air support whatsoever, and the country in which you are fighting is tropical. The men had been magnificent. Days without rations, rest, or a change of clothes had been their lot. Nevertheless they were in good heart and were fighting as the Gurkha soldier has always fought, hard, and without thought of cost.

In two days' time we were to move to back to a "previously prepared position." Even now one of the battalions, the 102nd, was on its way there and then, surely, we should hold them? Give the men a rest, a few squadrons of fighters and some fresh troops to give us a hand, and we'd soon have the Nips out of Malaya.

Yesterday, and throughout last night, the 101st had been having a bad time of it. Their job had been to cross the Perak river at Blanja and to hold the crossing until such time as all were over. The Jap air force, with nothing to oppose them, had been at them now for thirty-two solid hours. It was not that the casualties were heavy, on the contrary they had been remarkably light, but the effect of sitting in slit trenches and being subjected to incessant dive-bombing and machine-gunning was bad for troops who had little or no means of retaliation. I could hear them, still at it, now.

I got up and went back to the office, or rather the empty space under a Malay hut that acted as such. "Think I'll go and get some food," I said to the duty officer. "No time like the present." I could not remember when I had last had a meal.

The day wore on. Reports from forward indicated little or no enemy activity, though that did not mean that we could rest. Fighting patrols had continually to be out and doing. We could not afford to sit back in a country like this, and with no aircraft to give us information.

The Brigadier back, I went forward to see the 109th. En route I met two riflemen going in the same direction, and stopped to give them a lift.

"Well, where have you come from?" I asked.

"We were part of a patrol, Sahib, and got separated."

"Did you see anything; meet any enemy?"

"No, Sahib, nothing happened." The speaker and his companion were mere children. There were few old soldiers in the battalions now, due to the expansion.

"Nothing to tell me then?" I continued.

"Well, we did have a little incident. We met a man sitting down in the jungle, dressed in mufti. We sat down beside him, for we were tired, and tried to get into conversation. But he did not understand our language. Bhimbahadur here noticed that he had a box with him. At first we thought it might be a gramophone, for these we know. Then we considered again and we thought that perhaps it might be a wireless set. We were uncertain what to do, but after talk we decided that it would be best to take no risks. I took my rifle and shot him, Sahib. There is no more to report. Nothing of interest happened, Sahib."

Thus Johnny Gurkha. I dropped them at their destination, "You probably got a fifth columnist," I said. "Well done."

At sundown all was peaceful. The air had been active and several recce planes, prelude to attack, had been over. Otherwise all fronts reported quiet. We took the opportunity to get some rest.

I was up at 0530 hrs. There had been no distrubances during the night, no 'phone calls necessitating my presence, and I was feeling a new man. Most of our kit had been lost, but I managed to borrow a razor for a shave and afterwards went off into the jungle to find a stream to wash in. At this hour of the morning there was a suggestion of freshness in the air. The atmosphere was sticky and flat for most of the twenty-four hours but now, with the coming of dawn, I could feel a faint lightening.

Christmas morning. Nothing, I supposed, could be less like Christmas than this. From where I stood I had a clear view of the countryside, now brightening into another day. In the distance the jungle covered hills of the Cameron Highlands; to the left as I looked at it more hilly country with, centrally, the peak of Kladung, up which I had been wont to walk of a Sunday morning. Nearer it, it was all jungle and rubber plantations.

Rubber! I hoped I should never see it again. Most of the fighting had taken place amongst the rubber trees and it was not a pleasant form of fighting. Immediately to my front was a tin mine, deserted now; the Chinese coolies gone with the stream of refugees I saw threading their way down the main road to Ipoh. A field of paddy stretched to the stream at my feet. Overhead the new sun gave promise of another sticky day.

My thoughts turned to the Marai Narai of last year, Tauda China, and the snow-covered camp. I wondered where my battalion was. I had had no news for a long time. Probably in Iraq, I thought, where I would have given a great deal to be with them. However, I had been amazingly lucky. I was with the first complete Gurkha Brigade that had been formed. That was an honour in itself.

I walked back to the Mess—a room in a Malay hut—and was greeted with "Merry Christmas" by members of the Brigade Staff. The Brigadier was already there, pouring over maps and making notes.

"The General is due here this morning at 11.00 hrs., sir."

"Yes, Jack, I haven't forgotten. Get the 109th on the 'phone and tell them to let me have a report on last night's patrol work, will you?"

At 11.00 hrs. sharp the General and his G. S. O. 1 arrived.

"Good morning, sir. A merry Christmas."

"Same to you, though I've known better", he answered as he dragged something from the staff car. "Here's a couple of bottles of champagne for the Mess", he said as he handed them to me. "You can make use of them I've no doubt."

He and the Brigadier went off together while I followed with the G. 1. The situation was discussed, and then the orders for tomorrow's move to the "previously prepared position" at Chenderiang. This, I learnt, was no Maginot line, but the General said that there we were to make a stand; reinforcements were due out from England, and we should be able to give the men a rest. We were glad to think that now we should have the opportunity to refit and reorganise. In fact, we never got it.

The conference over, we returned to the Mess and offered our guests a drink. The Staff Captain had discovered some bottles of stout and had mixed them with

the two bottles of "the Boy" and made "Black Velvet." "Goes farther that way", he said in explanation as we toasted one another.

No gathering of Gurkha Officers this year. Many who started with us on the 8th December would never again attend Mess at their Headquarters, Dehra Dun and Dharamsala. Here's luck to their brave spirits and to the riflemen who went with them.

I drank a silent toast to my own Gurkhas and wondered as I did so how they fared. One thing I knew, and that was that they, like these I was so lucky to be serving with, were doing their stuff in whatever circumstances today might find them.

Orders were issued for an early move on the next day. We hoped to get away without contact. We had a long drive ahead of us. At midnight, the first troops, the 109th, arrived in their vehicles. We, the Brigadier and myself, met them at the cross roads in Pusing village, where the road to Batu Gajah branches form the main Ipoh road.

Close by, the guns of the Field Regiment opened up with counter-preparation fire on the far bank of the Perak river. A battalion of Jap cyclists had been reported, and we hoped to get in amongst them with a few shells.

"109th and 101st all clear, sir." The Brigade Transport Officer made his report. I told the Brigadier. "Right, let's be off," he said and moved towards my station wagon. No lights, but there was a moon, and driving would not be the strain it had been these last few nights.

I took the wheel. "Well, I've spent some varied Christmas days in my service," remarked the Brigadier.

"This can't go on for long, sir", I replied "We'll soon be after them now and by this time next year the Nips will be wishing they had never been dragged into the war. I wonder where we shall all be by then?"

"Famous last words" answered the Brigadier with a laugh. "Better be careful. All the same—I wonder?"

** ** **

1942-

PRISONERS OF WAR! And to know that the war is still to be won and that there is nothing you can do towards winning it. An unenviable "finis."

To begin with, we had been left much to our own devices. Then, for a while, our captors had begun to throw their weight about. Face slapping and other indignities had become the order of the day.

At times the yellow men had made themselves most unpleasant. Notably on the occasion when they had ordered us into a concentration camp for refusing to sign a paper undertaking not to try to escape. Nineteen odd thousand of us were lodged in a barrack square and its seven buildings, and surrounded by barbed wire and machine guns, the latter disposed so that, if necessary, they could do the most harm. This area, about the dimensions of a full polo ground, looked, when we are all in, like Epsom Downs on Derby Day, with the numbers multiplied by ten. On my floor alone, a room made to take fifty men, we numbered eight hundred and sixty officers and other ranks, including the Corps Commander. A veritable "Black Hole."

It is said that the British are at their best in adversity. The men were splendid; never was morale so high. They sang, got up impromptu concerts, and at the top of nineteen thousand British and Australian voices they sang the National Anthem while the puzzled and uncomprehending Sons of Nippon and others who were not Sons of Nippon looked on.

Disease. Diptheria and dysentery always with us, began under these cricumstances to rear their ugly heads. It became obvious that, given the time, we were faced by certain death, for our doctors could do little, and the Japs refused to evacuate the sick to Hospital.

Meanwhile, our Commander was in conference with the Japanese. Eventually after three nights and days and with the full co-operation of us all, he issued an order telling us to sign and taking on his shoulders the full responsibility. There was, of course, no alternative. It was signing under duress. We were allowed to return to our areas.

Individually, the most brutal atrocities had been committed. Men had been shot and tortured by these civilized Asiatics in manners too horrible to describe. Collectively our main trouble had been, and was to remain, food. We lacked vitamins and the result was beri beri, dysentery, diptheria, eye troubles even to blindness and so on. This when the Red Cross were sending stuff by the boat full. We worked it out eventually, just before we were released that for the whole three and a half years for which we had been the guests of the Japanese we had actually cost them the enormous sum of £12 per head in food.

Our lot in many ways was unenviable, but that of the unfortunate Gurkha and Indian troops was, at this time, far worse. These had been separated from us at the capitulation and, from what we had been able to gather, they had at once been subjected to the most intense and insidious propaganda accompanied by torture. It was, I think, our heaviest burden that we were unable at any time to be with them. The story of how the loyal troops came through it all will, I hope, be one day written by an abler pen than mine. They were a lesson to us all, and most of us had the grace to acknowledge the fact.

From the British camp as from the Australian many had gone elsewhere; some to Bangkok, others, including the Generals and Brigadiers to Formosa. The camp population was continually fluctuating. American and Dutch parties would arrive from Sumatra and Java. Parties went up-country. Few of us remained constant.

From the personal point of view the lack of news from our friends and relatives was a great hardship. At this time—though we were to get some later—we had received no letters and had only been allowed to write one postcard. We thought it probable that our relatives were still ignorant of our fates. We could only hope that some news had somehow got through.

To-day, Christmas Eve, our fatigues over, we sat about the Mess, which was also our sleeping quarter; a small ex-cricket pavilion, crammed to capacity inside and out, and talked. In the afternoon we lay on our home-made beds and read. After supper Bob Shean, late Carrier Platoon Commander of the 102nd, and I went over to the Australian camp to visit friends and later to Church.

The Australians were in Selerang Barracks, Changi, the block in which we had been incarcerated there, and the surrounding houses. From all sides came the sound of singing and music, for the spirit of Christmas was abroad. At each port of call we were treated to coffee and some form of cake made from rice

flour; the Aussies, as ever, the essence of hospitality. Later we went on to the midnight service in the home-made bamboo and atap Church. The Padre spoke words of hope and said that he felt certain that we should be out by Christmas next year. Outside, a brilliant tropical moon silvered the palm fronds. From another part of the camp the haunting notes of a single cornet came faintly playing Noel! Noel!

Christmas Day 1942. We were up early, exchanging unconvincing Happy Christmases. Followed the morning fatigues, rice grinding and the like, for at this time we of the Indian Army had no troops to help us, and we did all our own fatigues, including the cooking.

In the afternoon I took a walk around the padang, the late cricket ground. Everyone was out for the evening constitutional, and the sartorial effects were not such as would have pleased a peacetime adjutant. Most of us British had arrived in the camp with no clothes other than those in which we stood up. What additions we had been able to make to our wardrob s had been given us by the more fortunate. The Japs had done nothing for us. The result, now, after ten months, was usually a ragged shirt and equally disreputable shorts, patched ammunition boots or home-made rubber sandals.

Here I met a Malay Volunteer of my acquaintance. That morning, he told me, he had been down to the Civil Gaol where the civilians, both male and female, were interned, taking with him our camp-made presents for the children. These I had seen, and they were wonderful, as good in most cases as one could have bought in a shop. Over and above this we had collected the sum of one thousand one hundred dollars for them so that we felt that, at any rate, the kids would have something of a Christmas.

The Volunteer said that officers who had wives or relations in the Gaol had been allowed to visit them that morning. They had been given half an hour together in the open. There had, it seemed, been several sad disappoint ments; wives expecting husbands, only to find that they had been sentup-country and sometimes tragedy when a husband, eagerly awaited, was found to have died in hospital. This was the first time that they had been given this privilege, and no letters had been exchanged previously. On the whole, he told me, the women were looking fit and well. They put up a wonderful show.

After dinner came visitors from other Messes to drink coffee with us, and we smoked our issue present of two Virginian cigarettes per man while we talked of the future and what we would do with it. Looking back, I thought of 1939, of Richard and Joan and Shillong. I wondered where he was; with the battalion? And if so, where? I thought of the snow-covered camp at Tauda China; of log fires and good-fellowship, and of the men. I had already decided what I would do with my future, and the "simple things" played a very important part.

Around me, in the light of the one oil lamp—for at this stage we were allowed no electric light—I watched the faces of my fellow prisoners. Here and there I caught an expression of "far away," not often did we allow ourselves the luxury of so thinking, for we had learnt that it didn't pay. Tonight there was some excuse. Christmas under a tropical moon with coconut palms on all sides! From across the padang came the throb of a Hawaiian guitar and the plaintive song of a Javanese troubador.

Our guests departed, we went to our beds. I said good-night to Bob.

"Good-night, Jack", he answered. "Let's hope we shall be out of this by Christmas next year."

"Yes", I replied. "But I'd like to get another crack at these blasted Nips before it's over. I've got one or two little things I should like to settle with them."

For a while I lay awake thinking of the war—my war. The fourth Christmas; actively speaking, the last so far as I was concerned. Somehow I doubted very much if we should be relieved in time to fight again, in spite of my recently expressed hope. Oh well! it was the fortune of war and, as the troops say, "mustn't grumble." On the contrary, I realized how amazingly lucky I had been. Was I not sound of body and unhurt? What had I to complain of? All the same, it would have been grand to take part in a victorious battle, to be in at the end. The end? When would that be, I wondered?

Loyalty-

Two splendid stories of Indian soldiers' loyalty have recently been revealed. On the eve of his execution by the Japanese, Captain M. A. Ansari, of the 5th Rajput Regiment, scribbled a letter in the margin of a *Quran*. It read:

"At the present moment I have heaps of things to write but I find it difficult to do so. One thing I must tell you is that all my misfortunes were caused by my compatriots, who are only capable of selling their own mothers child. Don't think this is sheer bitterness. I am writing this because you are going to live and will be able to help your compatriots to turn from selfishness".

Captain Ansari was tortured, starved and flogged by the Japanese, and was finally beheaded. He was awarded the George Cross posthumously.

The M.B.E. was recently awarded to Subedar Shah Mohammed, 2/14 Punjab Regiment for his spirt of resistance while a prisoner of war. Sent with a party of 100 men to Canton, he was the senior officer there, and was held responsible for every escape and every refusal to bear arms. But the Japs failed to subdue his spirit.

His constant anti-Japanese propaganda was so effective that he was imprisoned for seven months, and even from his cell he continued to convey messages to his men exhorting them to resist the Japanese. He was of the greatest assistance in upholding the loyalty of Indian troops in Canton.

ARMY FARMERS IN EAST BENGAL

BY LIEUT.-COLONEL. GEOFFREY NOAKES

THE large-scale Army farming venture known as Local Resources, S.E.A.C., designed to supply fresh produce and meat to the advancing Fourteenth Army in Burma, recently came to an end with the handing over of the farms to the local civil government.

The scheme was originally conceived in 1943 by a Norfolk farmer, and AQMG in the H.Q. of Fourteenth Army. This army was then fighting the Japanese on the India-Burma frontier, with the dual task of resisting the expected Japanese offensive, and building up forces of men and material for our advance into Burma.

The movement of food for this rapidly increasing Army of over a million men was, owing to the lack of adequate railways and roads, a matter of considerable difficulty. All aircraft available were required for forward lifts and could not be spared for the transfer of stocks from India. Even if the volume of rations could be maintained, a large percentage had to be in tins, and in the hot and moist climate this was having a bad effect on the general health of the troops. Fresh vegetables and meat were especially necessary for hospital patients, many of whom were suffering from skin diseases.

With this necessity constantly in view S.A.C.S.E.A. authorised a vast scheme, with the object of providing fresh vegetables, pork, ducks, fish and goats to the troops gathered on the frontier, and later by air as they advanced into Burma.

A staff of practical farmers was selected from units and posted to the H.Q. of "Local Resources S.E.A.C." (as the scheme was known) to plan and control the whole enterprise. These included the Garden Superintendent of Government House in Maymyo, and an Indian whose business in peacetime was horticulture in Burma.

The Vegetable Scheme.

10,000 acres of vegetables were planned and sites were selected after much reconnaisance, as far as possible in centres where troops were already located, and which were near an airfield for the lift into Burma. This restricted the choice of land, and ultimately Local Resources had to contend with farms in the Sadiya Tracts in Assam, on the Imphal Plain up in the hills, to East Bengal at sea level, with a damp moist climate throughout the year.

The seeds were obtained partly through Lease/Lend ex-America, and the remainder from India. The latter were a constant source of trouble, and the poor quality, mixed varieties, etc., caused reduced yields per acre. Furthermore, S.E.A.C. had to indent for seeds on G.H.Q. (1) who passed the order on to the Dept. of Education, Health and Lands of the Government of India. The object of this was the co-ordination of the military demands of India Command and S.E.A.C. with the civilian requirements for both imported and locally grown seeds. Chaos resulted, and apart from the fact that the seeds always arrived well after planting time, they were of very poor quality with mixed varieties and

strains. For instance, one consignment, planted over 200 acres, from tins individually marked "Dwarf Beans" turned out to be a mixture of dwarf and tall, which made cultivation very difficult!

There is no doubt that the work, already started by the Government, of encouraging the improvement of good strains was well worth while. It is only fair to state that the demand for seeds during the years 1943/5 was many times heavier than in peacetime, and this is no doubt partly the cause for much of the poor quality seed. But it is after all a very true axiom that you need good seed to attain maximum yields.

Indian type of vegetables were grown during the monsoon period of seven months, and British type (peas, beans, lettuce, turnips, potatoes etc.) over the remaining five months. At Imphal, due to the high elevations and cooler climate, English vegetables were grown over a longer period.

During the first year, the labour had to be trained to cultivate the British type of vegetables, of which they had little experience. Mistakes were made, but the lessons were learnt and in 1946 the crop, had it been required, would have been heavy. The Indian labour was, however, constantly changing, so that much of the instruction was wasted. This would not occur on a civil commercial farm.

In order to cultivate the vast acreage of farms, varying in size from 200 to 2,000 acres, and control the other schemes, a Local Resources Military Unit was formed, consisting of eight officers and seventy-two British other ranks. These men all had civil experience in farming, and no praise could be too high for the work they put in. One or two non-farmers were posted, and they became very keen and want to continue farming after the war. Sixteen special units of Indian labour were raised, each 800 strong, of which a considerable proportion were malis. Local labour was also employed, particularly for clearing the land. One snag experienced was that in Malabar, where a number of the units were recruited, the word mali does not mean gardener, with the result that on arrival at the farm, the men staged a sit-down strike, saying they had not been recruited to work on the land.

D4 and D6 Tractors were obtained from military sources, and 4-furrow ploughs and disc and spike harrows imported from America. The bulk of the work was done by hand by Indian labour, however, with the *kodali*. Few Indians could be trained to use a spade or fork, and if given a long-handled rake preferred to squat on the ground holding the handle a foot from the end, with the remainder waving over his shoulder.

The D6 Tractor was found to be very suitable for the first ploughing, and was also used for dragging away tree stumps during the initial clearing of the land. Attempts were made to import a number of small row crop tractors, and had this been practicable, considerable economy in labour would have been possible.

An undertaking was given that no cultivated land would be used, and the majority of the farms were therefore hacked out of the virgin jungle—a prodigious job—before sowing could be undertaken. This took time, and it was at least a year after a farm was sited before the first harvest could be expected. Men were allotted at the rate of $2\frac{1}{2}$ to 3 per acre of vegetables, but it must be remembered that they were untrained and this figure included cooks, *chowkidars* and men employed on road bridges and drain construction.

A large number of pumps up to 15000 g.p.h. size were obtained from Engineer sources for irrigation. The trailer type of fire pump was also found to be most useful, as it could be quickly moved behind a 15 cwt., but few were available until A.R.P. began to close down in India, and even then far more could have been used than were offered. The yield arrived at as a standard was four tons per acre, but after cultivation for a year or two much higher yields could be obtained.

Vegetable growing on this scale was not a commercial proposition, and the cost per maund of vegetables was always higher than the local rate. There appears, however, to be an opening for farms of 200 to 400 acres highly cultivated, and near to the large cities where a good market could be assured. An adequate supply of really cheap vegetables is of great value to the poorer Indian, and encouragement might be given to cultivators by Government subsidies and practical help in the importation of seeds and farming machinery from abroad. A really mechanised vegetable farm would require little labour, and over 10 years could be run at a profit and produce a worth-while crop.

Pork Scheme.

This was for the benefit of British troops, and proved a most welcome variation to goat and bully beef. A sausage factory was planned, but was abandoned in 1944 owing to the difficulty in obtaining machinery, and in any case the output of the farms was preferred as fresh pork. The quantities issued to the troops was controlled by the necessity of increasing the breeding stock, and it was difficult to strike a balance.

The farms were initially opened by the loan of a boar and 25 sows by Messrs. Keventers. This stock was in the large farm constructed at Kanglatonbi, between Imphal and Kohima. Some of the worst battles of the campaign were fought over this area and all the buildings were destroyed. Fortunately Local Resources were able to evacuate the stock to Manipur Road a few hours before the Japs arrived.

The 1,500 acre vegetable farm on the Imphal-Kohima Road was also overrun, and a British Division was actually entrenched on the farm during the battle. They much appreciated the vegetables as an addition to their bully and biscuits. The farm could not be reoccupied until the Japs had retreated in August 1944, and so the land had to lie fallow for six invaluable months. The pig farm was completely destroyed.

Five hundred sows and 150 boars were imported from Australia and installed in three farms. It was hoped to get pedigree Middle Whites, but rather a mixture including Berkshires and Large Whites with various crosses were received. Losses in transit were heavy (about 15%) but this was mainly due to the poor housing and feeding facilities on the already overloaded ships. An experiment was made with a Middle White/Khasi cross, but this was not successful. The stock, which is in fine condition, will no doubt be very welcome in India, where herds have deteriorated following the impossibility of importation during the war.

A lot of the pork was issued to troops in hospitals, and the remainder parboiled and flown into Burma in the early hours of the morning. The capture of Burma came too soon for this scheme to get into full effect, especially as over a year was spent in securing the import of the pigs from Australia.

One amusing incident occurred while a consignment was being railed on the American operated B. and A. Railway from Calcutta to Dimapur. A signal was sent warning an R.T.O. to expect a train of 1 officer, 6 B.O.R's and 400 hogs. This became corrupted in transmission, and the O.C. train was greeted with a meal for 407 men!

Fish Scheme.

This was designed to produce up to 25,000 lbs. of smoked and salted fish a day to both British and Indian troops. The factory was situated at Chandpur on the Brahmaputra, where adequate supplies of fish were available. In order to avoid reducing the civil supplies forwarded by rail to Calcutta and Chittagong, four large Army R.C.L's were used to visit villages on the river bank who were unable to reach the railway with their catch without the provision of ice. The R.C.L's were flat bottomed with square bows, and capable of carrying 20 tons of fish. The crews recruited from Chittagong lived aboard.

The fish was gutted, deboned and washed on benches in the factory by locally employed civilians under the charge of four Naiks and British Sergeants. The fish was then salted by immersion in a strong brine solution for about twelve hours. It was found that it would keep up to five days. When, however, movement was necessary in metal railway trucks with an interior temperature under the summer sun of up to 120 degrees, this time was reduced to three days.

The fish was bony and required very thorough washing to remove the salt. It is doubtful whether it is a commercial proposition, especially when the supply of fresh fish is adequate.

A further development was to smoke the fish to produce a "kipper" taste. Chambers about 8 feet square were built, and the fish hung on hooks inside for varying periods up to twelve hours. The smoke was produced by burning sawdust obtained from the local ship-building yards. The flavour can be controlled by the choice of the wood used, but Local Resources had to accept all types offered, and were therefore forced to use a mixture.

Since nearly all types of fish were used, some were very bony, and this was not liked by troops, who had to sit on a box, picking at the fish in a mess tin. The cost was very low indeed, amounting to no more than 50 per cent. of the cost price of the fish, and this included the filleting, etc.

If the type of fish is selected, there may be a commercial future in this method, particularly if the smoke used is from woods which give a distinctive flavour. The offal can be used for fish oil and fish meal, and would considerably reduce the cost.

Goat Scheme.

This scheme allowed for small herds of sixteen goats (which were called "penny packets") to be reared by units. The kids were then reared in separate farms. The plan was not a success, as units were constantly on the move, and therefore constant changes of "ownership" were necessary which naturally reduced the interest of the unit in its herd.

The scheme was not intended to compete with the present commercial method of rearing goats by villagers, and the cost was at least 80 % higher.

Duck Scheme.

This was very ambitious, and introduced into India the Chinese Rice Husk method of incubation. Incubators were not available, and a team of Chinese hatchers was flown in from Chengtu University in China. The ducks were required primarily for issue to hospital patients as a variety to the monotonous

diet provided by normal Army rations, of which the men anyway had become heartily sick.

The stock of fowls and ducks in Bengal was steadily decreasing, as the stock was killed for the table, and the position was under constant consideration by the Bengal Government. Any relief, therefore, in the Army demand was welcomed and every assistance was offered.

It was necessary to site the hatchery in an area where duck eggs could be purchased, which was also near to an airfield. Feni in East Bengal was chosen, and a first-class farm sited by the S.C. (Poultry). The eggs were bought through local contractors at prices graded according to the fertility. All nonfertile eggs rejected after the first week were passed on to the local F.S.D. for re-issue.

In spite of a very steep increase in price for fertility above 30% the results were very poor. The local drakes had nearly all gone into the not, and those that remained were not very effective. Drakes were bought elsewhere and loaned to the villages, but as later Keel disease was found to be endemic in the villages, a Local Resources Laying Farm was opened. The stock was selected from 16-week-old disease free birds reared on the L.R. farms, and by the autumn of 1945, a really good laying flock had been built up.

This was inspected by representatives of the Dept. of Agriculture of the Government of Bengal with a view to the Government taking it over as a going concern, but owing to finance and the fact that all the buildings stood on land requisitioned under D. of I. Rules, the difficulties were found to be insuperable, and what was probably one of the finest laying flock in India was finally dissipated.

To check the spread of any disease, the houses, each holding about 150 birds, were spaced at least two to three hundred yards apart, with their own separate pond. This was very successful; the birds, which were of course very young, layed well and looked very fit. Fish meal and oil from the Chandpur factory was used in their diet, but the ingredient which produced the biggest increase in eggs was bully beef condemned as unfit for human consumption. The cost of the eggs was high (about 50% more than the Local Purchase rate) but the result was disease free and between 80% and 90% fertile eggs.

Incubators were not available in India, and could not be imported quickly enough, so the Chinese hot rice husk method was adopted. With the assistance of the Military Mission at Chungking, a team of one Chinese Head Hatcher and twelve hatchers was flown in. This team was adequate to deal with the intake of 18,000 eggs a week. The teams were accompanied by a British and Chinese Professor and the latter, Prof. Hwangmien of Chengtu University, stayed with Local Resources until the end, and his faithful service was of great value.

When the eggs were brought in by cart, the Chinese complained that the shells were often cracked and the germs broken. The solution was finally found to be in carrying them in boats by water, which is very steady.

The eggs were sorted and washed on arrival in pot. permang. to remove any chance of disease. They were dried in the sun, and then put in the wicker tubs bound with straw and paper to keep the heat in. Round the outside was a sheet of tin to keep the rats out. Meanwhile ordinary local rice had been heated in an open sort of metal dish known as a K.O. but pronounced G.O. in Chinese. These were unobtainable in India, and the Chinese insisted on bringing their own. Once the rice was hot a layer was put in the bottom of the tubs which stood about $3\frac{1}{2}$ feet high with a 2 foot diameter.

On top of the layer of hot rice 24 eggs were placed in a thin string bag. The Chinese were very expert indeed in placing the bags in the tubs, so that all the eggs rolled out flat. Each bag was followed by another layer of rice and it was this warm rice that produced the incubation temperature.

As the rice on the top and bottom of the tub cooled quicker than that in the middle, the eggs were always changed around from one tub to another. The temperature was kept between 98 and 102 degrees by this method and hatching was very regular. The Chinese seemed to know by instinct when a change of rice was necessary, and would leap out of bed at two o'clock in the morning if the temperature dropped. They never used a thermometer but held the egg up against their eyelid to test the warmth. The eye is very sensitive, and when checked by a thermometer their estimates were found to be correct within a degree.

At the end of the incubation period the eggs were placed on a huge bamboo covered hatching bed covered with mulberry paper especially imported from China. This paper was regarded as essential by the team and certainly proved very successful. Hatchability proved to be about 80%, although the teams insisted that 90 to 95% was achieved in China. The difference was put down to the rather weaker germs in the eggs from the young birds in the laying flock, and also to the excessive humidity in East Bengal.

From the hatchery the birds went into the brooder, sited alongside and capable of receiving 15,000 a week. Each hut had its own native attendant who, to check disease, was never allowed to enter another hut and always used a disinfectant foot bath on entering or leaving.

The young birds were reared on $\frac{1}{2}$ inch wire trays a foot off the ground. The brooders were made from split open 40 gallon drums covered in old tentage and blankets, with a hurricane lamp to provide the heat. Keel disease, Salmonella Gærtner and Litchfield were prevalent, particularly before the rearing farm was started, and losses were heavy.

The ducklings stayed in the brooder for 3 weeks and were then flown to rearing farms near to the hospital centres. Dakotas were used, and the ducklings were carried in wicker crates about 6×4 feet with 4 divisions to stop crushing. The planes were heated from the exhausts, and few casualties resulted unless the plane flew above 8,000 feet, when the birds suffered from oxygen shortage.

On arrival at the rearing farms, all birds were kept in bamboo houses holding about 400 and at least 50 yards apart, to check disease. The houses were kept very clean and strict veterinary precautions taken, but in spite of this, further losses from Keel disease were heavy. The birds were handed over to the R.I.A.S.C. at about 16 weeks, when they weighed 3 to $3\frac{1}{2}$ lbs.

The cost of each bird was high, about twice the market value, but this was partly due to the mortality rate and the high cost of the bamboo buildings, which were depreciated in value each year by 50%.

In 1945 the disease was checked by the introduction of the laying flock and blood testing with an antigen supplied by the Imperial Veterinary College at Izatnagar, which weeded out the reactors. There is no doubt, however, that disease will always be difficult to overcome in India on concentrated farms, but that with experience they can be made a paying proposition.

They would be particularly useful at the present time to increase the total number of birds held, which has decreased so seriously during the war.

The short review of such a vast undertaking can give little idea of the difficulties encountered by the little band of British officers and other ranks who planned the scheme, and controlled the Indian civilian personnel. In all there were fourteen officers, nearly all of whom are now demobilised and back on their farms, 80 B.O.R's, about 20,000 enrolled Indians and innumerable local civilians.

The victories of the Fourteenth Army and the handing back of East Bengal and Burma to the civil Government has rendered the majority of the

farms redundant and they have now been closed.

But the many thousands of tons of fresh vegetable, pork, ducks and fish produced by Local Resources formed an invaluable addition to the rations of our troops, and the whole lay-out formed a valuable experiment in large-scale production in India.

16th Light Cavalry to be "All Madrassi".

Oldest regiment of the Indian Armoured Corps, the 16th Light Cavalry, originally an old Madras Army unit but now composed of Jats, Rajputs and Kiam Khanis, will shortly be reconverted into an "All-Madrassi" regiment.

The 16th Light Cavalry was one of the first I.A.C regiments to be selected for nationalisation and the first to go into battle under an Indian commanding officer—Lt.-Col. (now Brigadier) J. N. Chaudhury, O.B.E. More than half its officer establishment is filled by Indians.

During the late war, after a 3,500 miles approach march from the frontier of Baluchistan to the banks of the Irrawaddy the 16th Cavalry plunged headlong into battle against the Japs exactly a month after leaving Quetta. They won, in their first eight days of fighting, four immediate awards for gallantry.

Taking part in the hard-fought Meiktila operations the regiment swept south with the 14th Army's spearheads to link up with 15th Indian Corps patrols outside Rangoon.

R. Es. Fine Work

The story of the work of the Royal Engineers in the restitution of Holland is one of the finest stories in the history of the British Army. Even while the greatest sorties of the war were being prepared, the Royal Engineers behind our lines were making ready to rescue Holland.

Against the disaster of total flooding they had assembled in Belgium and Northern France almost 500 mobile pumps, millions of sandbags, hundreds of miles of wire, thousands of piles for pontoons, bulldozers, mechanical shovels, cranes and trucks. A floating power station which was a ship that did nothing but make electricity, was berthed in Antwerp harbour. Power lines ran from her to the great Maxton power station, and from there they were sent north across the Belgian border into Holland on the very heels of the Army.

In the end it was the Royal Engineers, in the person of Brigadier Reed, who negotiated between the front lines the agreement with the Germans to allow food into Amsterdam and the west. It was Brigadier Reed and his men who lifted the wrecked bridges from the canals, raised the Bailey Bridges found fuel for the barges, and sent food supplies moving to the starving west with in four days of the signing of the agreement.— $Mr.\ A.\ D.\ Divine,\ B.\ B.\ C.$

MARCH TO FREEDOM

By "CHUSA"

ON April 25, 1945 the Japanese began to evacuate four hundred British and American prisoners of war from the Central Gaol, Rangoon, to Thailand, and at 12.00 hours on that day we learned we were to leave by road at 16.00 hours, carrying our own kit.

We were organised in four parties: (1) a working party of 200 B.O.Rs formed into four platoons, each commanded by a B.O., with another efficer as second-in-command; (2) a party of British and American officers; (3) a mixed party of British and American Other Ranks, under a B.O.; and (4) British and American airmen who, for alleged acts of indiscriminate bombing, had been subjected to particularly severe treatment and strictly segregated in No. 8 Block of Central Gaol.

Apart from the R.A.F. and U.S.A.A.F., the chief units represented were the Duke of Wellington's Regiment, the K.O.Y.L.I., the West Yorkshire Regiment, Gloucestershire Regiment, Royal Inniskilling Fusiliers, Cameronians, Lancashire Fusiliers, King's Regiment, and R.A.M.C. Indian Army officers in the party belonged to the 7th Rajput, 10th Baluch, and 17th Dogra Regiments, the 2nd, 3rd, 4th, and 5th Gurkha Rifles, Burma Frontier Force and Burma Sappers and Miners.

Although those seriously ill had remained in gaol, almost every man in the contingent had symptoms of beri-beri in one form or another. Few of us had had any footwear for months; few, especially among the officers, had any marching practice since being captured; some had suffered solitary confinement since their capture. We had tried to keep fit, but everyone had progressively lost weight owing to the meagre rations. The total distance covered in the four days' marching was about 65 miles.

Here are extracts from my diary, which I recorded on May 1, the day following that on which we were rescued:

April 25, 1945. Roll call was at 16:00 hours. At 18:30 hours, in true Jap fashion, we were ordered to move, and simultaneously detail teams of men to draw hand-carts on which was loaded the Japs' kit, buckets and wooden tubs for our own food and drink. The result was confusion; each Jap came up with different orders regarding the number of men required for the hand-carts, so that there were men moving constantly between their platoons and the carts, while the sentries tried to count us, getting the numbers different each time.

The administrative arrangements consisted of cooked rice, some beans and pork carried in the hand-carts for the evening meal, while the gaol lorry went ahead with uncooked rations and large empty barrels for boiling water.

We were in four groups: the working party of 200, under me; fit men of No. 6 Block under Nig 1 Loring; the remainder of the officers under Brigadier Hobson; and, in the rear, the Air Force personnel, under the command of Captain Hunt, of the U.S.A.A.F. The Jap escort comprised an advance guard of one N.C.O. (with bicycle) and three men; a senior N.C.O. with about three men to each group of 50 prisoners, and, I presume, some sort of rearguard. The

Q.M. went ahead with the lorry; the Commandant with his staff marched at the rear. In addition, twelve men and an N.C.O. marched ahead to arrange bivouac areas.

Several of us were wearing canvas rubber-soled shoes thrown at us in the morning; most of us threw them away after a mile or two as they had rubbed and blistered our feet. A few had good boots or shoes, but many started the march barefooted. I had chaplis, made out of the remains of my boots.

We started off down Commissioner Road going East, turned left at the first cross-roads past the Myoma High School, then left again, and on to the Prome Road. At Myoma I saw for the first time the above-ground portion of the astonishing air raid shelter our working parties had taken three months to construct. Above ground it consisted of a pyramid-like structure, 30 feet high, in three tiers, with a flat roof. It looked vast, but the shelter itself was below ground and, I believe, a bare 12 feet square. One or two Japs were standing about; there were some packing cases labelled and ready for loading; and a car or two. But it was obvious that this former Jap Headquarters was virtually deserted.

Columns of smoke were rising in parts of the town. We passed one—a large bonfire in a compound. Some bungalows were wrecked, many undamaged; everywhere compounds were overgrown and hedges untrimmed. Not until we reached Judson College did we see any marked signs of recent bombing. The University buildings were wrecked; innumerable bomb craters were to be seen all over the place, but most bombs had done no material or physical damage.

Our pace was a most welcome slow one. The Japs were quiet and apparently unruffled; hourly halts of ten to fifteen minutes were allowed, and at the end of about eight miles we had an hour's halt for food—rice, beans, and pork fat. Before we started eating, the Commandant, Tazumi, called up all unit and sub-unit commanders. Seated in a chair, which had been carried on the lorry, he addressed us quietly and with every appearance of good humour. He described and demonstrated signals to be used on the march, the action to be taken in case of air attack, and finally, what would happen to anyone attempting or succeeding in escaping.

He explained, not very convincingly, that the Burmans were now cooperating with them, so that no one who succeeded in eluding the Japs was likely to get very far. But there was no threat of collective punishment, or that one in five of those remaining would be executed, as had always been implied before.

At about 01.00 hours we reached our destination—a mange top about 14½ miles from our starting point. This was only about 2 miles over the legal maximum of 20 kilometres laid down in international law.

April 26th.—I slept badly. It wasn't ants which kept me awake; knowing how red ants like mango trees I had put my blanket as far away from a tree trunk as possible, and was amused at those who had rushed to claim a place where they could rest their backs against one. The sentries were noisy, their boots crushing dead leaves and rousing me just when I was dozing off. One incident showed that all Japs are not wholly brutal. Flt./Sgt. Richardson was sleeping close to me, and his bare feet were sticking out of the end of his blanket. One sentry noticed this as he passed. He tiptoed up to him and re-arranged the blanket so as to cover his feet.

At 08.00 hours we fell in for roll call. It took a long time and involved two or three re-counts. My feet were sore and stiff and I walked lamely. An ache in the lower part of my calf kept me awake during the night, and I wondered whether it would wear off or get worse and prevent me marching, in which case I knew what to expect. Roll call over, we breakfasted on the remains of the evening rice and pork.

Changing of the guard followed. It was carried out with parade ground ceremonial, and seemed to take a ridiculously long time. There was a great deal of bowing, interspersed with animal-like grunts, probably expressions of devotion to the Emperor, first by the respective guard commander and then by all members of the guard collectively.

Then followed the changing of the sentries, accompanied again by much grunting and bowing, and included the air sentry, posted some distance from the guard and bivouac area. This man was draped in the individual camouflage net; it had a few leaves stuck into it here and there, but as it did nothing to break up the outline of the man or conceal his shadow, it must have been of little value.

One amusing feature of the guard's arrangements was the Guard Commander's chair, always prominent in the guardhouse of the Central Gaol. The Guard Commander always sat in it, with a sentry on his left, and except in the case of his own officers or N.C.Os, acknowledged salutes in the sitting position. I settled down to rest, but got none. The Japs were running true to form; they seemed not to have thought out plans in advance, so that there were no comprehensive or detailed orders to cover the succeeding 24 hours.

We discussed plans for escaping, but agreed that individual escapes should be forbidden. The attempt when made should be a mass one involving the complete elimination of our escort, so that the lame ducks among us would have a chance of reaching friendly cover. We agreed to wait until the situation was a little clearer, and in any case not to make the attempt before reaching Pegu, and probably not before we had crossed the Sittang River. We knew the European war must be over in a few weeks, if not days, but how long would the Japs survive? If our imprisonment was to last only a few months longer, was it right to incur the casualties if an attempted escape was made, and probably leave those too weak to be condemned to certain death at the hands of an enraged remnant of our escort?

We knew our troops had reached the neighbourhood of Prome, and that fighting had been in progress about Taungup and the Taungup Pass for weeks, but there was no evidence that our men had advanced south of Prome or made further landings south of Taungup. We also knew our troops had reached Taungoo in the Sittang Valley, but did not know whether they had taken the place or advanced beyond it.

Obviously, the sudden evacuation of Rangoon and our own unexpected move showed there had been a surprise development. The Japs had hinted that our destination was Moulmein, which meant that we would have to march north towards our troops until we reached Pegu, when we would turn east. If the Japs had made a bad miscalculation we should probably meet our troops before they could get us across the Sittang River; if they had not mistimed things then the best time to escape would come when the Kerenni Hills would be closest to our route. It amounted to waiting until we reached Pegu.

Several of us had blisters, cuts or sores as a result of the first day's march, and where it had resulted from ill-fitting footwear the M.O. advised marching

in bare feet. This was better advice than it may sound, as most men's feet were hard and horny from going bare-footed for so long. There was a small amount of medical supplies available, and dressings were done whenever possible.

At 18.00 hours we had rice and chutney; half the rice had to be kept for the midnight halt. Chutney was issued on the scale of one bottle to ten men; it was pre-war stock of an Indian merchant in Rangoon, but was good, and the first we had had since our capture. The Japs allowed themselves a bottle between two men, and half a tin of Japanese tinned salmon or tunny fish each.

April 27th.—Last night's march was an agonizing one of 27 miles. One of our number fell out exhausted before we reached Hlegu. He was last seen with Tazumi, the Jap Commandant, bending over and talking to him. When asked this morning for news, Tazumi replied: He's all right. We hope he has been sent back to Rangoon, but I rather fear that he has met the fate meted out by the Japs even to their own people who fall out. Only the knowledge of that alternative kept me going throughout the night—and there were many in like case, most worse than myself. To get going again after a halt was sheer agony. I started the march wearing chaplis. Walking was painful, and even though the pace was barely two miles an hour messages came from the rear asking for a slower pace. But this time the Japs would not permit it.

At the first halt the Commandant came to the head of the column and spoke to me. He was quite friendly and pleasant. Speaking in broken English he asked how long I had been in the Army, and what was the British Army's marching pace. Replying in simple English with a few Japanese (and instinctively Hindustani words) thrown in, I told him. He told me the Japanese Army pace and remarked with a smile that I must find the present pace very slow. I agreed, but said it was necessary as few of us were fit to march at all.

I was now marching with one chapli on and one off, with an absurd idea that by so doing I was to some extent protecting one of my feet. Shortly after dark I was grateful for this absurdity when I nearly trod on a large black scorpion. There was also a good deal of broken glass about, but it wasn't long before I preferred to risk scorpions and broken glass to the uneven gait and discarded the other chapli.

Occasionally we passed an abandoned car; a few loaded lorries passed going north; but as empty lorries going towards Rangoon passed just as frequently there was nothing to suggest the near approach of our troops, until we reached milestone 20. From there onwards to the 21st milestone bridges were prepared for demolition and at other places for land or anti-tank mines. Some holes were 1 ft. in diameter, others 2 ft.; they were deep and looked as though they were prepared for aerial bombs. At 21st milestone we branched right towards Pegu, and almost immediately had an hour's halt for our midnight meal of rice and hot tea.

We hoped we had covered half the distance for the night, but men on the ration lorry said they thought we still had 13 or 14 miles to do. From now on almost every bridge was prepared for demolition. We reached Hlegu shortly before dawn; our hearts sank when we knew there was to be another hour's halt and more tea. Every one was tired and tempers were frayed. The pace was now scarcely more than $1\frac{1}{2}$ m.p.h., but greatly to their credit some men started singing. We reached our bivouac area about 09.30 hours, bedraggled and exhausted.

The area was very confined, and consisted of a smallish compound bounded by a thick bamboo fence in which there were three buildings. The best was taken by the Japs, the smallest allotted as a cookhouse, and into the third was crushed my party of 200. The remaining prisoners were bivouaced under trees. Party commanders were summoned before the Commandant, who expressed his pleasure at our obedience to his orders yesterday, and issued instructions regarding air precautions and other matters for today. One air sentry was to be found from the officer's party, the other by the Japs.

We settled down to our allotted areas. As soon as the cooks could provide it a meal of rice, chutney and boiled gram was ready. The rice was meagre, but we felt the gram gave us sustenance. I fell asleep, but was awakened by noise of aircraft and the shouts of air sentries. I watched, through a gap in the trees, a squadron of Liberators flying low. I had seen them often at 20,000 ft. over Rangoon, but never before had been able to distinguish the four-engine nacelles. Later a squadron of fighters passed over. I could not sleep again and envied some Japs who had never stirred. At about 22.30 hours (Jap time) we resumed our march.

April 28th.—We had an anxious time during last night's march. Night fighters were patrolling the road, but the excitements thus provided seemed to take our minds off our infirmities and the march was less agonizing. It was also much shorter. Abandoned cars and lorries became more frequent; most, if not all, were riddled with bullet holes and burnt out; one was still blazing. Air warnings were frequent and the speed with which most of us, headed by the Japs, threw ourselves into the ditch for cover gave the lie to our physical ailments. Once, when a lorry about 100 yards away started up, the road was cleared in a fraction of a second.

The marching rate was about the same, but the Japs weren't so indulgent, constantly urging us to go faster. We had an hour's halt at about 02-00 hours and hot tea. Arriving at the bivouac area about first light we were drawn up in an open field, with the hand-carts parked nose to tail on the road, while the Commandant reconnoitred some low bamboo and jungle covered hills the other side of the road. Some rough areas were allotted to the various parties, and we moved to them. Fighters came over and took an interest in our hide, and in the hand-carts. They continued to come over throughout the day, but only one plane shot us up, doing no damage.

Most of the men were in a highly nervous state, and with no well defined limits to our area were constantly moving further and further from the road, so that it was impossible to keep a check on their movements. The Japs, too, were suspicious and ordered a roll call. As they were not supervising, we reported all correct without a count in order to avoid disturbing those asleep or resting. We got a little rice and some golden syrup, but that was all for the day. Cooking was forbidden, and there was no water.

The Japs were extraordinarily lax. In our section there was only one sentry and he was posted on the wrong side to prevent escapes. During the afternoon 17 men made off from my party of 200, and altogether 36, including two officers, got away. It was reported that the hand-carts were being discarded, and that the Japs were throwing away kit. Under the eyes of the sentry we helped ourselves from the hand-carts. I found a brand new pair of Jap shorts, medical equipment, a bottle of iodine, quinine tablets, and a bandage.

Convinced the Japs were going to leave us, I collected my party, gave them my views and explained that I wanted them to stick together. Several

men were thus persuaded not to go off, and it was a shock to me when, after dark, the Japs returned and we fell in to continue the march. Many felt my advice had been bad, though I still considered it would be folly to break away until we had passed through Pegu.

The reason for discarding the hand-carts and lorry became apparent when we left the road just outside Pegu and followed the railway line to Wah. At this point we must have been within five miles of our troops. It amazed me that there was no ban on smoking, except when the sound of aircraft was audible. Some Japs sat on the railway line, striking matches and smoking quite unconcernedly.

At the point where we left the road a squadron leader fell out and has never been heard of since. He was at the rear of the column with the Block 8 party. I never saw the incident, but at the halt just before we left the road he either did something he shouldn't have done or didn't do something he ought to have done. The Jap sentry butted him in the stomach with his rifle and knocked him down. When last seen he was lying down with the Jap medical corporal bending over him.

The going was very rough. The dew-sodden grass was soothing to our bare feet, and the bright moon helped us, but patches of a thorny creeper kept cropping up, while the unevenness of hardened paddyfield mud were agonizingly painful. The Japs were unperturbed and unhurried; we had the hour's halt at 03.00 hours, with some uncooked gram, raw onions and jaggery, of which every man carried a handful in his pocket, if he had one. We had had no water for 24 hours, and raw onions did something to assuage my thirst.

The feet of one senior officer had become half-paralysed and he was incapable of walking; assisted by stalwart B.O.Rs he succeeded in reaching what proved to be the last bivouac. Crossing the railway before dawn we moved to a well-wooded hamlet adjoining the Naung Pattava station. I had few thoughts but that of sleep, but eighteen hours were to pass before I got any.

April 29th.—Shortly after dawn party commanders were called for. I saw the Commandant with Matsuda, the interpreter, standing in a small clearing, and hobbled towards them. I expected to hear their reactions to yesterday's escapes, and wasn't reassured when, on approaching them, Hunt of 8 Block and I were told we weren't wanted, leaving only Brigadier Hobson and Nigel Loring to face the music.

The Commandant looked grim, and the interpreter anything but conciliatory. So it was with increasing surprise that I watched the conversation proceed in what appeared to be a very affable and courteous atmosphere. The Commandant wrote something; then the Brigadier sat on a log and also wrote. They then shook hands; the Commandant walked away, followed by a dejected looking Matsuda, resembling one of the Seven Dwarfs.

I went over to the Brigadier, and heard to my great joy that my hunch had been right, and that our escort had gone. The Brigadier, standing on the log, announced that we were free. A great cheer went up, and as I looked through the trees to the east, I saw our late gaolers moving in extended order like bats out of hell towards the next village. The men crowded round each other with mutual congratulations. Then we got down to business, for there was obviously an anxious period ahead before our new-found liberty could be made secure.

The Japs had said the British troops would rescue us in a day or two. We were unarmed, and there was every likelihood that other Japs might take an

interest in us. We had no food, and the attitude of the local inhabitants was doubtful. Our encampment was soon full of villagers. The headmen, promising food and firearms, busied themselves with professions of loyalty and requests for certificates. In the end we got neither arms nor food from this particular village.

Our chief danger came from our own aircraft, which were continuously over the area and certainly unaware of our existence. Orders were therefore issued at once to ensure concealment from air observation; air sentries were posted. With the white Japanese underpants which had been given to us before we left Rangoon we laid out a ground strip message: "White P.O.Ws now free here; send help soon; drop radio". One American attempted to attract the attention of the airmen with a small piece of mirror, but without success.

While laying the message north of the bivouac, a small fight started with rifle fire and an occasional grenade in a village a few hundred yards away. The message party hurriedly moved to the west of the bivouac, screened from the north by a short line of trees, and set out their message afresh. Villagers said the firing came from a small party of Japs who were trying to intimidate them into providing bullocks; this was a new danger, and we speculated as to what would happen if our presence became known.

Food was a vital necessity—we had had no meal for 48 hours and nothing substantial for considerably longer. A few sweet potatoes had been collected, and we pooled onions and gram. While these were being prepared for cooking and we were conferring in a hut, the danger we had anticipated arrived in the shape of four Hurricanes. At first we thought they had come in answer to our signals, but our hopes were soon dashed when we heard the whistle of a bomb and its explosion. We were in for trouble. Bullets zipped through the matting walls of the hut. We decided to disperse and find cover on the ground away from the central part of the bivouac. I had hobbled to the hut, slowly and painfully. As the third plane approached, I moved out of it as fast as I have ever run in my life.

I flung myself in a small depression just as the 'plane's machine guns opened up. A second later Jock Ferrier flung himself in on top of me, bullets splashing all round us. We were still too close to the target, and started off again. I had only reached the railway when the fourth 'plane arrived. I extended myself across the sleepers and alongside one rail, thanking God for my slender proportions but feeling very naked and obvious. I was outside the line of fire, and during the next three or four runs no bullets came near. Then one 'plane, I think, saw our ground strips, dived as though to attack but did not open fire. Immediately afterwards all four 'planes flew off.

A few minutes later the whole area sprang to life. Half-naked men, singly or in small parties, streamed across the paddy field; one party ran to a village five or six miles away before they stopped. For my part I stayed near the railway station, where I heard the Brigadier had been killed. It fell upon me to take charge, but with everybody scattered it wasn't easy to know what was the best thing to do. I went off to think things out. Several joined me, including Major Drudge Coates, whose advice and assistance were invaluable. Nigel Loring sent me a message that he, with Paddy Eccles and one or two others, would remain by the ground strip message, which he had re-arranged into a large S.O.S. But aircraft did not again come near.

To contact our troops was the most important thing; the other was to obtain some food. Major Jean Lutz, of the U.S.A.A.F., volunteered to go to

where our troops were thought to be; we could see supply dropping six or seven miles away—conclusive evidence that our troops were there. He set off on his own initiative disguised as a Burman, with a Chinese youth as guide.

We were offered food and accommodation for the 400 prisoners in Naung Gyam village. Making sure there was no treachery afoot, we accepted, and by nightfall about 350 of us were concentrated there. Maung Chan Tun and his wife, Ma Kyin, were our hosts; the latter had herself arranged the billeting and cooking. About ten of us were accommodated in the Hpoongyi Kyaung, and had a frugal meal of rice and pickled cucumber, with some hot tea.

While we were settling down for the night, Lutz returned; he had brought back an escort of a company of Indian infantry and transport for about 200. Nearly all the P.O.Ws (about 250) in the vicinity of the Hpoongyi Kyaung accompanied him to the waiting transport and I, with one or two others, remained to collect scattered parties in the morning. I settled down, but despite fatigue, felt wide awake. The tragic end of Brigadier Hobson was difficult to forget; the solitary fatal casualty in circumstances which might well have caused a hundred; and I brooded over it far into the night.

April 30th.—Out of sheer exhaustion I dropped asleep. Just after dawn Chan Tun woke me with the news that there were small parties of Japs in the village and elsewhere. I looked out of the window and saw a small party being guided by a villager to a part of the village where there were no ex-prisoners; as I watched another and larger party emerged. I closed the window hurriedly, but continued watching through a slit at the bottom. They passed so close that I could easily have thrown a stone into their midst, and it was with a feeling of thankfulness that I saw them heading eastwards.

I sent messages to other parties of prisoners lying up, telling them the situation, and asking small parties to join me at the Hpoongyi Kyaung; ordering the larger parties to report their position and remain where they were. Squadron Leader Duckenfield sent back: "We have had to turn back because Japs are lying on the edge of a village slightly north of us and command good view of approach to Kyaung. Propose stay here until I hear from you again". Eventually this party joined us. With the help of these village messengers I located a party of 80 under Captain MacDonald at the southern end of the village; a party of 75 under Major Wernher, U.S.A.A.F. in a village about half a mile from our previous encampment; and in a more distant village to the south a party of six B.O.Rs who flatly refused to move until assured that the R.A.F. would not again use them as a target.

It seemed expedient to await developments. The Japs had gone to ground, but I could still see occasional parties. Once a single Jap appeared, clothed only in shorts and armed only with a stick, plodding his weary way towards the Sittang river. Later a party of five armed Japs moved wearily in the same direction. One was seen to fall several times, rising again to struggle forward a few paces, until he could do so no longer. When our escort arrived he was seen and riddled by a tommy gun, handled by a stolid Yorkshireman, who was taking no chances.

After rice and pickled vegetables we settled down to wait for our troops. There were two anxious periods; the first when artillery opened up on a village to the west, and the second when a brisk small arms fight flared up in the direction of the railway station. Chan Tun told us that after the bombardment tanks were assaulting the village, and it seemed possible that our village might be the next on the list. I wrote out a message to the Tank Commander, informing him

of our existence and asking for his protection. "Topper" Brown volunteered to deliver it, and set off dressed in Burmese clothes and accompanied by a villager, just before the small arms battle broke out near the railway station.

To protect ourselves from stray bullets we arranged a barricade of rice baskets, happily full, and lay down in a long line on the leeward side. The firing gradually died away, and shortly afterwards our lookout reported troops moving south across the paddy fields to the east. We recognised them as British troops and watched them reach the end of the village, where they contacted Captain MacDonald's party. A few minutes later one section arrived at the Hpoongyi Kyaung. "Topper" Brown returned and we were all escorted back to the railway line, watched, no doubt, by small parties of Japs, who wisely refrained from interfering.

Major Roche, of the West Yorkshire Regiment, greeted us, and while waiting for transport, we surveyed the bodies of 38 dead Japs, stripped of their clothing by the villagers. These had been the cause of the small arms fight; issuing suicidally from the cover of our previous day's encampment, at a cost of three slight casualties on our side, they had been killed to a man.

But there were none among us who did not feel it was a fitting climax to a long period of callous and humiliating treatment.

Hong Kong Shanghai Artillery Disbanded

After 105 years of service, the Hong Kong Shanghai Royal Artillery are to be disbanded. Originating in 1841, the China Lascars, as the H.K.S.R.A. were then designated, consisted of Madrassis, but later the regiment became the Hong Kong Asiatic Artillery and Sikhs and Punjabi Mussalmans filled the ranks.

In World War I batteries of this regiment took part in the fighting along the line of the Suez Canal, saw much action against the Turks and were engaged at the two battles at Gaza. In 1934 the Hong Kong Brigade, as it was then called, ceased to exist as such and all batteries were formed into the Hong Kong Shanghai Royal Artillery, which title has remained to the present day.

During the late war the H.K.S.R.A's. 23rd Heavy Anti-Aircraft battery helped defend Mersa Matruh. Another of the regiment's batteries, the 24th, served in the Suez Canal Zone and the 15th Heavy A-A Battery was at Aden. Tragedy befell the H.K.S.R.A in the Far East. At Hong Kong and Singapore all its batteries were compelled to capitulate after a gallant fight.

More than 3,000 ex-prisoner-of-war gunners of the H.K.S.R.A have now returned to India. A large number of them are being discharged on medical grounds as a result of what they have suffered at the hands of the Japanese.

REBUILDING A NAVY

By COLONEL C. FOUCAR, M.C.

SPEAKING generally, the people of India know the Army and what it represents; but even today the Royal Indian Navy means nothing to vast numbers of Indians who have never set eyes on the sea. War affoat is utterly beyond their ken, incomprehensible and terrifying.

In 1939 this ignorance of the Senior Service was even more marked. It was not without its effect on R.I.N. recruiting. Yet, despite initial handicaps far greater than those experienced by the Army, the R.I.N. developed fast. Unlike the Army, it had to get down to the job at once; and the job was well done.

Look at a map of the World. Vital ocean highways meet, as it were, on India's doorstep. Note her vast coastline of some three thousand miles, her few and widely scattered ports. For these reasons a strong navy would seem essential for India. But the 1939 Indian Navy was lamentably small.

The Indian Navy has a long and honourable record; but for the decade following the end of the First Great War the story of the Royal Indian Marine, as it then was, is a sad one. There was drastic retrenchment, and the Service became little more than a survey department and dockyard. Officers and ratings with war experience were ruthlessly axed. The whole burden of India's maritime defence then lay on the Royal Navy at an annual cost to India of about £120,000. Of course it was a ridiculously cheap bargain; but whether it was a good bargain is quite another matter.

There was some improvement in 1928 when the R.I.M. was restored to combatant status; in the following year Indian officer cadets were regularly recruited. The next forward step was in October 1934, when the Royal Indian Navy came into being. With the restoration of the R.I.M. to combatant status, India had undertaken responsibility for her own local naval defence and the provision of certain escort vessels. But the years of financial depression and the needs of the Army prevented anything much being done.

Plans for expansion of personnel and the provision of modern ships were made. These plans were considered and accepted with minor modifications by the Chatfield Committee when it arrived in the country at the end of 1938. Modernisation was to be very gradual and spread over a number of years, finance remaining the delaying factor.

Of the existing five escort vessels, three were out of date and were to be scrapped; the remaining two would be renovated. Four new escort vessels were to be built. The plans covered a general increase of personnel, including depot, training, and other staffs; new training establishments with the requisite equipment were to be provided; reserves of officers and a Fleet Reserve would be formed; local naval defence measures would go forward.

When War overtook us in 1939 little of all this was beyond the paper stage. There were no new escort ships, and all in commission were too slow for their duties. Their main armament was not up to R.N. standards; high angle armament was hopelessly inadequate; they had no Asdic or echo sounding

equipment; their electrical equipment was of the simplest. The torpedo was unknown.

The Service, with Headquarters of F.O.C.R.I.N., was based on Bombay, all shore activities being centred in the congested Dockyard area. Undoubtedly this saved expense by cutting numerous overheads. Thus, centralisation enabled certain officers to emulate the Gilbertian Pooh Bah by filling more than one appointment simultaneously. But the system stored up trouble against the very time when the R.I.N. would be required to justify itself.

In Bombay, F.O.C.R.I.N. was out of close touch with the Commander-in-Chief, the War Department, the other two Services, and all the Government offices. All these were in Delhi, where major naval questions were decided, often in the absence of naval experts. The Service suffered in consequence; but it was only after eighteen months of war that Headquarters moved to Delhi in March 1941. Clearly there were disadvantages in the transfer from Bombay, but they were small when set against the earlier handicaps.

A word about the Dockyard itself, essential adjunct to every navy. In normal times it was a repair and refit establishment for the handful of R.I.N. ships and certain R.N. vessels on the East Indian Station and in the Persian Gulf. For these comparatively simple needs it sufficed. But it was small, and very definitely not up to date. After visiting it in 1868 Lord Mayo had noted: "The machinery and all the appurtenances are of the most antiquated pattern".

Certainly in the years that followed the Dockyard did not stand still; but in 1939 there were still in use buildings and plant dating from Lord Mayo's time. The engineering workshops had, in fact, just completed their centenary. Happily the pre-war expansion plan had included the Dockyard. Orders for new plant were placed before September 1939 and were destined to be filled with fair speed.

The R.I.N. personnel strength in September 1939 was 114 officers and 1,475 ratings. In the R.I.N.V.R. were 37 officers; there were no men in the recently sanctioned Fleet Reserve. Unlike the Indian Army, which unwillingly received a breathing space of many months, the R.I.N. was immediately required to place itself on a war footing. Local naval defence plans contemplated the prompt requisitioning, fitting out, and manning of numerous ships for antisubmarine and mine sweeping duties; the Examination Service at all defended ports had to be operated; the Naval Control Service, the Sea Transport Service, Port War Signal Stations and other essential activities could not be delayed.

It is impossible here to detail the many tasks undertaken by the then diminutive R.I.N., but something of their magnitude may be judged by the fact that in September 1939 no less than 31 auxiliary vessels were taken up. Civil shippard facilities and the R.I.N. Dockyard were fully employed. By mid-October fourteen ships were ready for duty; all were at their war stations by the end of the year. Of course before hostilities ended the Service had grown far greater; but for a navy which began the war with a strength of some 1,600 officers and ratings this was no mean feat.

The resources of the Dockyard were heavily strained. First it handled certain R.N. ships and the escort vessels of the R.I.N. All these were ready for war on September 3rd. Work then began on auxiliaries; eight of them were at sea by October 1st. Armed merchant cruisers were being turned out just as quickly as by the modern shipyards of Belfast. From those hectic months in the autumn of 1939 the Dockyard never looked back. It provided supervision for work undertaken in the commercial docks; began the degaussing of ships;

manufactured minesweeping and other gear; controlled all the electrical installation for requisitioned ships. Its labour force expanded fast, and there were all the attendant troubles of competition with civil employers, shortages of skilled men, and lack of supervisors. Added to this was the cramped condition of the Dockyard area itself, and the struggle to modernise without holding up vital work.

However, the biggest problem in those early days of the war was the manning of requisitioned ships. They were useless without crews, and without a Fleet Reserve the R.I.N. had neither officers nor men to spare. Training in seamanship, let alone naval seamanship with its numerous specialised tasks, is a long process. But those auxiliaries had to be manned at once. The only possible source of supply was the merchant service, and here there was keen competition from the shipping companies. The war meant increased work for ships of all kinds; often, the R.I.N. had to be content with the second best in men.

Those merchant seamen were not of the standard usually recruited for the R.I.N., many were illiterate and unfitted for specialist training such as gunnery. But the H.O. (hostilities only) ratings filled an urgent need; they stood loyally by their work; without them the R.I.N. could not have functioned in the first period of strain. By the end of 1939 they had doubled the strength of the Service. Yet, if efficiency was to be maintained, a better type of man had to be recruited and properly trained.

In pre-war days the R.I.N. had very rightly insisted on a high standard of training both for officers and ratings. Officers were generally trained as special entry cadets with the Royal Navy since no training facilities for officers existed in India. The greater part of the ratings had engaged as boys. On the hulk H.M.I.S. Dalhousie, stationed at Bombay, these lads were trained and carefully educated. Passing out, they undertook an initial period of ten years active service as continuous service ratings.

H.M.I.S. Dalhouste was not an ideal establishment; but in 1939 the building of a new school, H.M.I.S. Bahadur, began at Karachi. In 1938, too, the recruiting of special service ratings opened. These men of the educated type were required for the enlarged R.I.N. contemplated by the expansion plan. A depot for them was to be provided on the site of Bombay Castle; but when war came they were still housed in the R.I.N. Barracks inside the Dockyard.

At that time the only other training establishments, all within the Dockyard, were the Signal School, Gunnery School, Mechanical Training Establishment and the Anti-Submarine School. Notable omissions from the list were torpedo, electrical and radar schools. Personnel employed on instructional duties numbered some sixteen officers, and a dozen warrant officers.

On the impact of war the long term policy was to increase the recruiting of special service men who, in time, would replace H.O. ratings and man the new ships that were being built. The main difficulties were the finding of instructors and equipment, and the situation created by the centralising of all activities within the Dockyard. On the other hand, two of the main bugbears of expansion faced by the Army were avoided. All recruits had to know English or Urdu; and the R.I.N. had always eschewed anything akin to the class system of the Army which, of course, could not exist aboard ship.

Radar instruction furnishes a good example of the training problems encountered. In 1939 radar was in its infancy; it was not until some three years later that the R.I.N. had qualified radar officers. The first instructor was a wireless telegraphist who was no expert. His equipment was a single early type

set, and another that was incomplete. Later a qualified officer was obtained from the Admiralty. It was under conditions such as these that the R.I.N. strove, and strove successfully, to expand.

At first new accommodation was planned on far too modest a scale. That there must be a break out of the narrow bounds of the Dockyard had been foreseen in 1938, yet the mistake was made in the early wartime expansion plans of not looking far enough ahead. The effects were hampering, and false economy proved more expensive in the long run. The intake of recruits had to be checked as there was no housing for more men. Training establishments moving out of their original Dockyard quarters found new homes; rapidly outgrew them; had to go elsewhere. Tales of cramped and makeshift quarters deterred would-be recruits; morale was affected; training was delayed and otherwise suffered.

H.M.I.S. BAHADUR opened in mid-1940, and the boy's school moved to Karachi. H.M.I.S. Dalhousie then became a training establishment for special service ratings. It was soon outgrown; recruiting was restricted; another move was made to Castle Barracks when they were ready; again, still more accommodation was required. In 1942 a temporary establishment, H.M.I.S. KHANJAR, was commissioned at Varsova, but even this could not cope with the recruits required. The problem was not finally solved until the opening of H.M.I.S. AKBAR at Kolshet in 1944. This establishment has instructional facilities for 2,500 recruits and is thoroughly up to date.

Bahadur at Karachi became inadequate for the boys entry. It had to be enlarged. Then another establishment for junior boys was required. It was a similar tale for the Gunnery, Torpedo and Electrical Training and other establishments. However, there eventually grew up a series of thoroughly modern and excellently equipped schools with qualified instructors. The original shortcomings had been conquered, and by 1945 R.I.N. training compared favourably with that of any other navy.

A great advance was the formation in 1945 of a sea training flotilla of some of the older sloops and other vessels, and the provision of a sea training ship for boys. The previous lack of sea training in modern vessels had been a great drawback. Officers and ratings cannot be produced ashore, so all ranks had perforce to acquire much of their learning on active service afloat. Efficiency had suffered, as it suffered with the employment of H.O. ratings; but there was no alternative.

Officers training presented peculiar difficulties. With no pre-war organisation for it, the subject had to be tackled, as it were, from behind scratch. Until 1943 there was no room in barracks for reserve efficers under training; they were in billets, and the distractions of Bombay were many. A series of short intensive courses gave them the rudiments of their new profession, but most of their real training was effected on service. The disadvantages of this state of affairs are manifest.

Much space has been given to this subject of training, but the full achievement of the R.I.N. cannot be appreciated unless there is a realisation of the tremendous task it faced in building up its personnel. Fortunately, by the time that Japan entered the arena the worst of the Indian Navy's teething troubles had been surmounted. Possibly it would be more correct to say that they were known, and proper methods of treatment in hand. This was as well, for with the Japanese in Indian waters the R.I.N. faced many fresh problems.

For its new craft the R.I.N. was almost wholly dependent on overseas shipbuilding facilities. Some of the new sloops and minesweepers were already in commission by the end of 1941, others were to follow. New lesser craft had also been added to the Service. All these were thoroughly modern in armament and electrical and other equipment. To combat the Japanese in the Bay of Bengal and in Burma waters, coastal force flotillas were raised. These comprised Fairmiles and H.D.M.Ls. These small ships with their aggressive role did much to improve morale. There is no room here to speak of their work, but they achieved great distinction in operations against the Japanese.

The formation of the Landing Craft Wing was another development brought about by the fight against Japan. Here there were peculiar problems. Personnel came from the Army. Many of these soldiers knew neither Urdu & English and, for the first time, the R.I.N. met the language problem. Communal distinctions over feeding were another new puzzle for the Senior Service. Unhandiness, resentment of the rapid promotion of some of these newcomers, and the many other trials attendant on the large-scale conversion of soldiers into sailors were further troubles. An acute shortage of landing craft until comparatively late in the war did much to delay training.

With the fall of our possessions in the Far East, the Dockyard assumed a new importance. It was now the only Allied Naval Dockyard between those of Alexandria and Simonstown in Africa and the distant bases of Australia. By 1942 it was rid of some of its encumbrances; by 1944, it had been vastly enlarged and modernised; the labour strength had risen by about six hundred per cent. the output per man was probably lower than in the United Kingdom but, despite the shortage of skilled labour and reliable supervision, the standard of workmanship was excellent. Heavier and more complex work than anything ever previously undertaken in any Indian shipyard had been achieved, and this by men who for the first time were handling modern warships.

The fall of Singapore and the loss of its W/T station, threw upon India a great share in maintaining a vital link in the Imperial communications system. Naval wireless stations had to be reorganised, extended and modernised. Equipment for this was speedily forthcoming, but again the greatest problem lay in the recruitment of adequate educated personnel. By 1944, this had been largely overcome; Calcutta and Bombay Fort W/T stations had been greatly developed; and the Indian wireless chain was complete, providing valuable links with Whitehall, South Africa, and the South-West Pacific area.

Sea Transport was another aspect of R.I.N. work which advanced greatly. The Sea Transport service is one of the Navy's most important duties, and the one most closely affecting the other two Services. It is responsible for the shipment overseas of all troops, animals, vehicles and stores of all kinds. On September 3, 1939, the whole organisation consisted of seven officers, sufficient to deal with the normal peace-time trooping work. By 1944, the establishment consisted of 97 persons, spread round all the defended ports, with an administrative and operational headquarters at New Delhi.

The work had, of course, increased many times over. The flow of men and supplies into India on the west coast, and the flow out of India to Malaya and Burma in 1941 and early 1942, and again in 1944-45, was very great. India's ports handled more shipping than ever before. The main difficulty in the development of the Sea Transport organisation lay in the dearth of experienced officers, and it was not really until late 1943, when a number of officers

with planning and operational experience in the United Kingdom and the Middle East were obtained from the Admiralty, that the manning difficulties eased.

The story of the operational work carried out by the R.I.N. remains for other pens. Suffice to say that the Service took an active part not only in Indian waters, off the coast of Burma and in the Red Sea, but was represented in the more distant theatres of the Mediterranean and the Atlantic. All that this article sets out to do is to give some indication of what was achieved in building up the Service which in 1939 was ill-equipped in ships and other essentials, and lacking in personnel. The obstacles in the way of expansion were formidable. That they were triumphantly overcome is to the credit of those officers who planned for the future, doggedly carried on the work of training, and refused to be defeated by circumstances.

Results may be briefly summarised by a few figures. By mid-1945 the manning strength had risen to over 3,000 commissioned and warrant officers and nearly 28,000 ratings; over 100 shore establishments comprising various head-quarters, coastal force and local naval defence bases, the Naval Control Service, the Sea Transport Service, training establishments, R.I.N. hospital, numerous wireless stations and many other organisations were in being; the ships in commission in 1939, including nearly all the original auxiliaries, had either entirely vanished from the scene or were employed for training and similar purposes.

Amongst the new ships were 6 sloops, 2 frigates, 3 corvettes, 16 mine-sweepers, 16 trawlers, 2 motor minesweepers, 5 coastal force flotillas of M.Ls., and the numerous vessels of the Landing Craft Wing including a landing ship, infantry, large. Other new ships were about to be commissioned. Cruisers were visualised for the near future.

The R.I.N. has travelled fast and far in the last six years; it has learnt many lessons that must be of the greatest importance in the time ahead. Adequate reserves, ample elbow room for all shore establishments, the necessity of keeping abreast of naval developments are some of these. Another is the assumption of a greater share in the burden of India's naval defence.

Providence has given to India strong ramparts and a wide moat. On this occasion the tide of war swept up to her boundaries, and then was halted. Next time, perhaps, the tide will be more difficult to stem. India, geographically and politically, stands at a very important crossways. She must be wise both as to her friends and her defences. She cannot afford to neglect her moat.

General Godwin-Austen.

Lieut.-General A. R. Godwin-Austen, P.A.O. in India, who was awarded the K.C.S.I., in the King's Birthday Honours List, has been promoted to the rank of General. During the first World War he served in Gallipoli, Egypt and Mesopotamia, won the M.C. and was mentioned in dispatches; in the late war he commanded the 8th British Division in Palestine and Trans-Jordan, later took over the 12th East African Division which eventually smashed the Italian forces in Abyssinia, and then became commander of the newly-formed 13th Corps in the Libyan Desert.

The 13th fought and won the battle of Sidi Rezegh, relieved Tobruk and drove Rommel's forces from Derna and Benghazi to Agheila. It was at Tobruk that General Godwin-Austen wrote his laconic message: "Tobruk relieved but not more than I am", which still remains a classic in despatches from the firing

line.

DESTRUCTIVE COMBAT OR SUBVERSIVE WAR?

BY COLONEL M. C. PERCEVAL-PRICE

THE particular methods which brought about the final defeat of Japan and of Germany have made us inclined to concentrate our attention and consideration on methods of causing mass destruction of material, such as the atomic bomb and saturation air raids. Speculation on the future of war has become focussed on those weapons and methods which completed the destruction of our enemies, without consideration of the conditions which made them so effective. It may be wise to consider whether this restricted form of speculation is justified or prudent.

The particular weapon which completed the destruction of the Scharnhorst was a torpedo fired from a cruiser; but in speculating on the future role of battleships in Naval warfare we do not confine ourselves to forecasts of bigger and better torpedoes and estimates of the efficiency of defensive measures against them. These things are considered in relation to the weapons and tactics which led up to the opportunity of sending the Scharnhorst to the bottom with a torpedo.

If the war had ended after the fall of Crete we would probably have found military thought centring round the development of airborne operations to the exclusion of other forms of fighting; or if it had ended after the fall of Tripoli our speculation would have been mainly concerned with the development of tanks, mines or self-propelled guns. There is a natural mental perspective which causes events which are close to us to hide the background.

The trend of development towards mass destruction of material has blinded us to other trends, and caused us to overlook other developments. This is partly because such mass destruction took a large part in the final defeat of our enemies, and partly because the effects of it still remain unpleasantly evident even to the victors, who have experienced this destruction in smaller measure. This development of destruction is not confined to the last war, but it has only become evident in the twentieth century. The South African and Franco-Prussian Wars were not noticeably more destructive than the Crimean or Napoleonic Wars. Nor were the campaigns fought in India by 'John' Company more destructive than those fought in the time of the Moghuls—rather the reverse.

Previous trends of military development towards the massing of particular weapons or the mass employment of particular weapons have occurred, but have been abandoned because of their very tendency to mass employment. In 1913 and 1914 the tendency was to mass as many riflemen in the front line as possible, with reserves ready immediately to take the place of those who become casualties. It was felt that the more men there were the more rifles there would be, and the more rifles there were the more bullets there would be. Obviously the more bullets there were the fewer enemy would there be left alive. Yet this mass of musketeers was soon found to be a vulnerable target without effective hitting power. They were vulnerable because of their concentration, and they were ineffective because although their weapons were lethal, they

were not given the chances that they had expected of aiming them at the enemy.

Again in 1917 the trend of development was towards longer and longer bombardments and heavier and heavier barrages. Yet this mass employment of artillery was found to be tactically ineffective on account of the very efficiency of its powers of mass destruction. True, the emplacements, personnel and morale of the enemy were to a considerable extent destroyed; but so also was the power of tactical exploitation destroyed owing to the state to which the ground was reduced.

Is it not possible that an effort to obtain even greater destruction of material by atomic bombs, rockets and saturation air raids may also prove ineffective for similar reasons?

Every missile, whether it be rocket propelled, remote controlled, airborne or dependent on atomic energy, has to start from somewhere. Research may therefore be directed towards finding a means of exploding or destroying these missiles at or close to the point of departure. The problem is not one of conveying a large weight of dangerous material accurately to the target. It is a question of setting up, within effective range of the enemy's missiles, the necessary vibration to detonate the explosive, or of creating the necessary electrical or atomic conditions to cause the release of the atomic energy in the bomb or shell.

With the radar aids of the future to assist in the location of the enemy's weapons and missiles, and with improvements in remote control by wireless it should not prove impossible to achieve this. Bearing in mind that a bomb already exists which can be made to follow a moving target, it does not seem a fanciful dream that we should be able to explode at any rate a small proportion of the enemy's missiles at their point of departure.

If this should be achieved, the more powerful the missile the more dangerous will it be to the firer. A premature with a 25 pounder may be unpleasant, but a premature with an atomic projectile is a catastrophe. Assuming development on these lines, the firer of destructive missiles finds himself in much the same position as the rifleman of 1914 in that he is both vulnerable and ineffective. The bigger and more destructive his missiles become and the more that he masses them, the more vulnerable does he become. Nor will his missiles be effective, because although they will be destructive and lethal, he will not be given the opportunities that he had hoped for to launch them at his target.

After 1914 the rifleman hid himself in dugouts and pillboxes and dispersed himself to reduce his vulnerability. He pinned his hopes on getting himself into the enemy's positions by surprise or with the aid of weapons such as tanks. It is quite possible that in the future we may find the firers of rockets and those that launch atomic missiles, trying to disperse themselves or conceal themselves from radar detection, and trying to get within range of the enemy's vital targets by making use of some form of vehicle which will protect the missiles from the vibrations to which they are vulnerable. But what is comparatively easy with a rifleman is by no means easy with a rocket launching platform or with a jet propelled plane.

Just as the employment of massed artillery in 1917 destroyed the possibilities of tactical exploitation, so also does the employment of a mass of modern highly destructive missiles destroy the possibilities of strategic and political exploitation. After two very severe lessons the world may possibly realise that

the physical and economic condition of a defeated country is of great importance to the victor. It is just as important, in fact, as the condition of the enemy's roads and bridges are to a victorious army after a break-through. Unfortunately or fortunately, the economic condition of one country now affects all other countries who normally have dealings with it, and very considerably affects any nation whose demands on it are sufficiently great to warrant a war in order to obtain them.

The further that we learn to look ahead the more will we hesitate to use weapons which cause mass destruction. The tendency will be to try and get less powerful weapons into the enemy's country by some means or other, so as to force a decision without causing the destruction of too great a part of the enemy's economy and physical resources. In spite of this tendency no one will deny that the use of destructive combat, or the threat of its use, may have a very big effect on any future war. If we are unfortunate enough to be unable to avoid another large war it may not, however, be altogether dominated by weapons of mass destruction. From what has been said above, it appears quite possible that by the time that the memory of this war has become sufficiently dim to make another major war possible, such weapons may be largely discarded in favour of other methods of warfare.

What other trends of development in warfare are there which can be found by investigation and examination of recent history?

Before investigating trends which may become more pronounced it is advisable to go back to the fundamental reasons for war as opposed to combat. The only reason for going to war is to force another nation to do something which we cannot persuade it to do by any other means. A robber who wants another man's watch, uses force or threats of force, if he estimates that the owner of the watch cannot be made to part with it by persuasion. If the robber is sufficiently ruthless he will not hesitate to kill the owner in order to gain possession of it. But if the only effective force is a grenade which injures both the owner and the robber and completely destroys the watch, then any but the most foolish robber will pause to consider whether he cannot get the watch by some other means.

This roughly represents the state which we have reached to-day. The robber of to-morrow who will hesitate to use the destructive grenade will seek some other means of evading the owner's defences and of causing him pain without risking injury to himself or the watch. Were the robber able by some means to cause the owner of the watch acute toothache or violent indigestion, he could soon persuade him to part with his watch if by doing so he obtained immediate relief.

If we examine the history of the war and of the world immediately before and after it, a tendency to work in this very way becomes evident. Hitler's technique in dealing with Austria and Danzig was precisely on these lines. He worked from inside the country which was his objective, and caused acute discomfort and internal upheaval, which he hoped would force acceptance of his demands. In the case of Austria, the stomach trouble caused the surrender of the watch which Hitler coveted.

During the war we have seen effective work done by resistance movements inside occupied countries. The Maquis, for instance, were able to do very much more than similar movements have been able to do in the past. One of the chief reasons for this was the application of modern methods of communication to the organisation of this resistance movement. Another reason was the

vulnerability of the industrial economy and transport systems of a highly developed country to sabotage.

In less developed countries the resistance movements were also successful, notably in Yugo-Slavia and Crete. Timing and co-ordination are required to get the best results and to avoid such tragedies as the premature rising of the Poles in Warsaw. But it is modern wir less which provides the means of achieving this timing and co-ordination, and it is reasonable to suppose that in the future we may see even better organised and more effective resistance movements.

In these examples we have discovered another trend of military development very different to that which leads to more and more destruction of material. Subversive war is probably the best name for it; and it is important that we should clearly realise that it is war. Because war in the past has consisted mainly of combat, the soldier is inclined to neglect the consideration of other methods of using force to obtain a favourable decision from the enemy. Subversive war may not accord with accepted martial traditions, but then neither did gunpowder accord with the accepted martial traditions of the pre-gunpowder era.

But how do these two tr nds, towards destructive combat and towards subversive war, react on one another? Having suggested that we may be confining our thought too much to the methods and effects of destructive combat, we must not fall into a similar error and neglect all consideration of such destruction.

What more effective method of defence against weapons of destructive combat is there than to place plenty of important enemy personnel at the target? There are two ways of doing this, both of which are intimately connected with the tendency that we have noticed of achieving results by subversive activities. The first method is to conduct the struggle in the enemy's own country without removing his forces or government, and without breaking off diplomatic relations with him. A coup d'etat, followed by the establishment of a new government prepared to meet the demands made upon it, is the successful conclusion to be hoped for from this method. The second method is to invite the enemy into one's own country and there defeat him, without removing him, by making conditions so unbearable for him that he is prepared to withdraw on any reasonable terms. In neither case is the enemy given an opportunity to use weapons of mass destruction against the force which is causing him to change his national policy and make concessions.

The first method mentioned in the previous paragraph is no new phenomenon. There have been many cases in history of revolutions and fifth columns which have received valuable assistance from an outside Power. The initiative has, however, usually come from the revolutionaries who have sought external aid and have been prepared to buy it by promises of concessions if the revolution should prove successful. There is no reason why the initiative should not come from outside, instead from inside the country. Practically every nation has its discontented elements, and a number of those who have nothing to lose and every hope of gain by an overthrow of the existing government. Nor are there many nations in which the existing regime cannot be brought into disrepute by the help of bribery and corruption. The object of what we may term the underhand aggressor must therefore be to foster and increase such discontented elements by the use of money, the press and of broadcasting; to weld together and organise them by the provision of means of communication and of trained leaders and administrators; and finally to train and arm them so that a successful coup d'etat can be accomplished.

This is not a process which can be carried out quickly or without very considerable effort and expense. But if we recognise that this process is war and that the alternative is a "slogging match" with terribly destructive purches by each side, it will be realised that the effort and expense required to achieve the result by subversive activities are vastly less than those required by the "slogging match". Although it is true that the process of fostering artificial revolution is a very slow one, at the end of it the aggressor is in a position to extract the desired concessions from a country whose industrial economy and machinery of administration have not been unduly damaged. Moreover, some economic penetration will probably have already been achieved by the aggressor. In fact the conditions which are finally desired are probably reached quicker by underhand aggression than by destructive combat.

Another factor to be considered is the existence of the U.N.O. and the possible threat of destructive combat waged by forces under U.N.O. control. The aggressor who wages subversive war avoids this threat. In fact, if he is really skilful he may even gain the support of the U.N.O. A careful education of world opinion and well directed propaganda may well succeed in representing the revolution which the aggressor has fostered as the "will of the people", and with the help of a certain amount of gold, voting statistics can be made to confirm this. The "rigged" plebiscite is a comparatively easy concession to make to those who render lip service to democracy.

The second method of placing the enemy on his own target, namely inviting him into one's own country, sounds far from a satisfactory method of warfare, or even of self-defence. It is, in fact, a form of national Satyagraha, but though as a whole passive, it can be very active in detail. The degree of success achieved by resistance movements in occupied countries has shown the possibilities of this form of warfare even when hastily organised and dependent to a large extent on help from outside. But in the case of a deliberate resort to a resistance movement by a sovereign state the movement can be thoroughly organised beforehand, hidden stores of explosives, food and weapons can be prepared and equipment for efficient communication can be got ready. The forces to take part can be trained in peacetime without this training being handicapped by the constant danger of discovery by the occupying power.

How effective can such a method of warfare be, even with all the advantages of previous planning and organisation? In Ireland in the early twenties these methods forced England to make a treaty which granted most of the demands of Southern Ireland. No doubt there were other factors which helped to bring about the signing of this treaty, but there are always many factors which help to bring about the successful conclusion of a war. The fact remains that from the point of view of the South of Ireland, the outcome of the struggle was reasonably successful and that the method of applying force that they used was internal resistance within their own country.

It is possibly not even essential to have the whole of the population in support of the resistance movement, although of course such support greatly simplifies the task. A minority, by adopting the methods of American gangsters, can gain control of local Government and with careful preparation beforehand there seems every possibility that a minority could, by the same gangster methods, gain control of the Government of a country, especially one which was controlled by foreigners.

Of course, the answer of a ruthless enemy to an internal resistance movement is to take drastic reprisals against the civilian population. A nation that plans the adoption of internal resistance as a form of war must accept this risk. The casualties to the civilian population from this cause are likely to be less than those caused by a war of destructive combat. If these two forms of war are the only alternatives, there seems to be no reason for discarding subversive warfare in one's own country on account of the risk of reprisals on the civilian population. The failure of the Nazis to stamp out resistance movements by the ruthless methods that they used shows that, provided that morale remains high, internal resistance movements cannot be suppressed by such means.

This method of inviting an enemy into one's own country is naturally only a defensive policy, but let us consider the alternatives open to a nation with few resources available for engaging in destructive combat, when threatened by a nation with many such resources. The first possible course is to recognise defeat and to agree to the demands of the better armed nation. This course does at least preserve the weaker nation intact and its industrial economy and machinery of administration is not destroyed. The weaker nation only survives, however, as a slave, and the aggressor would, no doubt, take steps to see that it remains so.

The second course is to engage in destructive combat with the stronger nation. At best, the stronger nation may decide, after a period, that it does not pay to continue the combat. Even so, the weaker nation will emerge with its industrial economy severely injured, with heavy loss of life to civilians as well as to its armed forces, and with its standard of life lowered. At worst, it may find itself in addition a slave nation, or even be dismembered and find that it no longer exists as a nation at all.

The third course is to put its trust in the U.N.O. and in forces controlled by the U.N.O. This we may hope will be an effective course. It is quite possible, however, that before the necessary conferences can be held and the forces of the U.N.O. can make themselves effective, the weaker nation may find itself engaged in combat with the aggressor. Even if the final outcome of such combat is unfavourable to the aggressor, due to the intervention of the U.N.O. forces, the weaker nation will still finish with its economy impaired, a considerable toll of casualties, and a lower standard of life.

The fourth course is that which we have suggested as a possibility, namely an effort to defeat the aggressor by a previously organised resistance movement. This may, of course, be combined with efforts to arrange intervention by the U.N.O.

There are evidently definite advantages in this method of subversive warfare. To be really effective it requires loyal support from the bulk of the nation, and the morale of the nation must be high and capable of standing up to reprisals on the civilian population. But all measures of national defence ultimately depend on the morale of the nation and on its determination to preserve its national rights at all costs. Preparation for defence by internal resistance would include measures of education designed to raise the morale of the nation and to prepare it for an ordeal. Recent dictators have made similar preparations very effectively, even though their objects may have been very different to the defence of the nation's legitimate rights.

We have already outlined a possible means of aggression by subversive warfare, and we must now consider methods of defence against such aggression. These would also consist largely of education and measures designed to raise

the morale of the nation. As every discontented section of the population would constitute a possible basis for subversive aggression, defence measures would also include the removal of grievances to the greatest extent possible. Nevertheless there will always be a certain number of those whose nature it is to be perpetually "against the Government".

George Birmingham tells an amusing story of a party of Irish gunmen who enlisted in the ranks of the Republicans in the Spanish Civil War, and found to their horror that a section of the world press described them as "Loyalists". Such an indignity was hardly to be supported, and the party promptly started to fraternise with the opposite side. This is hardly a practical method of dealing with such malcontents, but it does show that the approach to the problem must be psychological. To put these habitual rebels into prison tends to make them into martyrs and heroes and achieves little.

This article has tried to show that the development of weapons causing mass destruction of material may not be the only development of the future in the ever-changing methods of warfare. It has drawn attention to developments in subversive warfare which have been taking place, and suggested that these developments may merit greater study than those of destructive combat. But are these matters the concern of the fighting Services? It is submitted that they most certainly should be. If the task of the Services is to prepare for a resort to force by the nation, should this prove necessary, then the Services must consider all methods of using force and train for them.

How convenient it would be to fight one's war in someone else's country, more especially in the enemy's country? Surely this is an object which the Services should try to achieve by study and training. The Civil War in Spain is considered by many to have been the first round in the struggle between Russia and the Axis Powers. It would have been worth a very heavy expenditure of national resources by Russia if she could have renewed the struggle in Spain or better still Germany. As nations have resorted to subversive warfare in recent years there is every reason to suppose that these methods will be tried again. They certainly deserve very much more study by the Services than they received before the war.

It may be too much to hope that there will be no more war, but possibly we may hope that there will be no more destructive combat and we may find ourselves dealing with subversive warfare instead. Would this development of subversive warfare be a bad thing? It has been suggested that the best methods of defence against it are to educate the nation, raise its morale and its standard of living and remove grievances. When defence expenditure is diverted from the manufacture of destructive weapons to such objects as these we shall be several steps nearer to Utopia.

Giant British Airliner

Brabazon I, Britain's biggest and most advanced land plane yet developed, is now taking shape. Four of the type have been ordered. Its cruising speeds will be 250 m.p.h. for the one which will be powered by orthodox engines, and 350 m.p.h. for the other three, which will be jet propelled. The first of the type is expected to be in operation by April, 1947; it will accommodate 80 people in berths, and 180 with seats.

THE MYSTERY OF HENRY FITZCLARENCE

By "HYDERABAD"

KING William the Fourth had by Mrs. Dorothea Jordan five sons. One entered the Navy, and another the Church. The remaining three brothers all served in the Army in India, and two of them died here.

Of the three soldier FitzClarences, the one who held the highest military office was Frederick—Lieutenant-General Lord Frederick FitzClarence, G.C.H., who became Commander-in-Chief of the Bombay Army in November 1852 and died on October 30, 1854 at Purandhar, the ancient Maratha fortress near Poona which was then and is still used in a small way as a hill-station and military sanitarium. Near his grave there, which I have seen, is the church which was, I believe, built by his widow as a memorial to him.

The next most distinguished was George, who was created Earl of Munster in 1831 after his father's accession to the throne in the previous year. He reached the rank of major-general, and committed suicide in 1842.

Henry, the third of the brothers, has always been something of a mystery. For a number of years I have been trying to clear up certain questions connected with him, and at last I have attained a good measure of success.

The usual reference books have always been vague about him. Recent editions of Burke's Peerage omit him altogether, though they list his four brothers and five sisters. Older peerages are odd. Lodge's Peerage for 1832 calls him a Captain, R. N., and states that he died in India in 1818; but in the 1857 edition this is corrected to 87th Foot and 1817. The new edition of the monumental and highly authoritative Complete Peerage states that he died in India, but gives no date or place. His death is announced, without any details, in the Gentleman's Magazine for July 1818; and the Army List for May 1818 also shows him amongst the "Deaths" but no date or place is given.

My attention was first drawn to him about 1931 by the late Sir Evan Cotton, then the foremost authority on the history and genealogy of the European in India. He had come across, in Scenes and Characteristics of Hindostan by Emma Roberts (1837, Vol. I, p. 258) a passage which refers to "a broken column at Allahabad" which marks "the resting-place of a FitzClarence", the brother of Lord Munster.

With his usual enthusiasm and zeal, Sir Evan took up this clue. It was obvious that the only Fitzclarence to whom it could refer was Henry. He wrote to the Chaplain of Allahabad, who reported that there was no trace of the "broken column," and no entry in the burial register. He spoke to me—I had recently visited the old (Kydganj) cemetery at Allahabad, and had taken notes of interesting epitaphs, but there was no Fitzclarence amongst them, and I should certainly have copied it if there had been. He inspected (I think) the copies of burial registers at the India Office, but without success. And finally he wrote to the then Lord Munster, who replied that to the best of his knowledge Henry was drowned at sea, but he could not say how, when or where.

There the matter rested for a time. Not long after Sir Evan Cotton's death I came across a newly-published reference to George and Henry, which I must introduce by some details of their military careers.

Both were originally officers in the 10th Hussars in the Peninsula, and as such played a prominent part in the colossal row in the regiment which culminated in the trial by court-martial of the commanding officer, Colonel Quentin, in 1814.

(A printed copy of the proceedings of this trial is in the library of the Judge Advocate-General in India). Both brothers were important witnesses for the prosecution, but Quentin was acquitted of the greater and graver portion of the charges against him—which in part amounted to allegations of cowardice—and the Prince Regent in stern terms announced in a General Order that the officers of the regiment were to be dispersed, so as to break up the factions which had formed.

In consequence of this edict George and Henry FitzClarence were both "banished" to India, George being gazetted as Captain to the 24th Light Dragoons with effect from 12th November 1814, and Henry as Lieutenant to the 22nd Light Dragoons from the same day. As a matter of fact, the Governor-General at this time (the Marquess of Hastings, formerly the Earl of Moira) had previously offered to take them out to India on his staff. Before appointment to India, Moira had for some years held the office of Master-General of the Ordnance, and one of the Ordnance subordinates was a certain Thomas Alsop. From two letters printed by the Royal Commission on Historical Manuscripts (Report on the MSS. of R. R. Hastings, 1934, Vol. III, p. 300) it is clear that the then Duke of Clarence first asked Moira for an appointment in India for Alsop—who was married to one of Mrs. Jordan's five children by previous connexions—and that Moira then offered to take out George and Henry to India.

Neither letter is dated, but the Editor of the Report assigns both to 1812 or 1813. They run thus:—

"To a man of Your Lordship's enlightened and liberal mind no apology is necessary and I shall therefore at once state the motives of my application and my object in mine (? mind). It is at the request of Mrs. Jordan I now address Your Lordship and after the friendship that has subsisted between her and me for more than twenty years and that lady's excellent conduct for the whole of that period I cannot refuse her in requesting Your Lordship to take out to India her son-in-law Mr. Alsop. I feel the less difficulty in applying to Your Lordship as Mr. Alsop is to my certain knowledge a man of ability and in the prime of life. He is not I believe totally unknown to Your Lordship. Mr. Alsop is so anxious to have the honour of attending or of following Your Lordship that if he can obtain any situation in Your Lordship's family, he will resign his situation in the Ordnance, and take an ensigncy. I cannot venture to ask for any specific situation for Mr. Alsop, but I may with truth add he is fit almost for anything and Your Lordship would find him a perfect under-secretary....'

From the second letter I extract a few passages:—

"...The Prince Regent sent for me and talked over the kind offer Your Lordship had made me relative to my sons George and Henry...After a very long and serious conversation, it appeared both to my brother and myself it was more to the interest of my two sons they should pursue their military studies in Europe...."

Thomas Alsop was made a police magistrate in Calcutta, and died there on April 11, 1824, at the age of 50. His widow, I believe, subsequently appeared on the London stage. Her half-brother, George FitzClarence, when he did eventually reach India, became an A.D.C. to Moira, and returned overland to England in 1818 with the dispatches of the Pindari War, writing a good book on his journey. His later career has already been described.

These letters led me again to turn to the mystery of Henry FitzClarence, and in particular to try to solve the question—when and where did he die?

In the Calcutta Annual Register and Directory for 1887 I found that H.E. E. is given in more than one list as his second initial, but I have not ascertained (what name it represents) FitzClarence is shown as a Lieutenant in the 22nd Light Dragoons, then stationed at Bangalore, and as being an extra A.D.C. to Sir Thomas Hislop, the Commander-in-Chief at Madras. But his name is omitted from the Index. At the end of the volume are lists of deaths, and of passengers arriving in and departing from India by ship, but his name does not appear in any of them. But in a similar publication for the following year, Gardener's Original Calcutta Annual Directory and Bengal Register, 1818, I found amongst the "Account of Administrations to Estates in 1817" the name of Lieutenant Henry FitzClarence. Yet his name does not appear in the list of deaths in 1817—244 items—at the end of the book.

I then turned to the War Office Records, and the Librarian, in addition to providing me with some of the details from old peerages, army lists, etc., informed me that Henry FitzClarence was appointed a Sub-Inspector of Militia in the Ionian Islands on September 11, 1817, with the rank of Captain. On the following December 25, he exchanged to the half-pay of a Captain in the 73rd Foot, and on January 1, 1818 became a Captain in the 87th Foot. But the War Office had no record whatever of the date and place of his death.

I next addressed the India Office, though with little expectation of any result, for I felt sure that Sir Evan Cotton had explored that source years before. But the Superintendent of Records, while confirming that the copies of registers of deaths and burials contained no record of the matter, was kind enough to discover and supply the following extract from the (Calcutta) Government Gazette, third supplement, dated September 18, 1817:—

DEATHS

"At Allahabad on the evening of the 2nd instant, whilst on his progress to the Upper Provinces, in the Suite of the Governor-General, Lieutenant H. E. FitzClarence, of His Majesty's 22nd Regiment of Light Dragoons, and Aide-de-Camp to Lieutenant-General Sir Thomas Hislop, Baronet."

The notice is confirmed by an entry in the Governor-General's own diary. Under date September 2, 1817, the Marquess of Hastings, who was then travelling up the river, wrote: "I have been pained by the death of Lieutenant Henry FitzClarence, one of my aides-de-camp. He was a mild, amiable young man, earnest in seeking information, and in improving himself by study. He sunk under the fourth day of a fever... This day we have passed the fort of Allahabad." (The Private Journal of the Marquess of Hastings, 1858, Vol. II, p. 209).

It is evident that the postings to the Ionian Islands Militia, and thence to the 73rd and 87th Foot, were made in ignorance of the fact that Henry was already dead, and they were doubtless void on that ground. In any event, such things were in those days usually links in a complicated chain of promotion by purchase or by adroit avoidance of purchase, the intermediate links being mere paper transactions. It is possible that the object was to effect his return to something congenial in England, where the scandals of three years before in the 10th Hussars were doubtless beginning to fade from the memory of the public and the War Office.

So Emma Roberts was right after all, and none of the authorities are complete and correct. The remains of this forgotten son of a King of England rest in an unknown grave at Allahabad, unmarked even by the "broken column" which once commemorated the fact.

JAPANESE ANIMALS IN SIAM

BY LIEUT.-COLONEL C.R.D. GRAY

AFTER the defeat of Japan one of the problems in South East Asia Command was the disposal of the Japanese Army animals known to be scattered all over the countries in which Japanese forces had been operating. In principle, it was ruled that (i) no animals would be backloaded to India because of the danger of spreading Epizootic lymphangitis, and because India already had a surplus of Army animals; and (ii) all animals fit for further work would be held and disposed of in the best interests of the countries concerned, through Remount channels, in conjunction with the local civil authorities.

In Burma, Malaya and French Indo-China, non-belligerent countries over-run by the Japanese, the problem was one of tracing the animals, and returning them to their former owners, or distributing them to civil authorities, without payment, for the rehabilitation of the country. Siam, however, had been an ally of Japan, and all animals found in that country were treated as enemy property, and therefore booty. No mutual aid agreement between Siam and Britain was then in existence, so it was ruled that such animals were to be sold, proceeds being credited to H. M. Government.

The Japanese submitted to us a list of their known animal locations in Siam, but it promised inaccuracy, as a footnote stated simply: "This list being made by tracing memories of investigated members, by the lack of data concerning we regret to say this list not exactly correct."

At the time of our arrival in September, 1945 the railway system had been thoroughly disorganised by the R.A.F., and the few roads were in a very bad state. We began inspections of the Japanese animals, but it took some time owing to these bad communications. Transport was extremely limited; only a few Jeeps had been flown in.

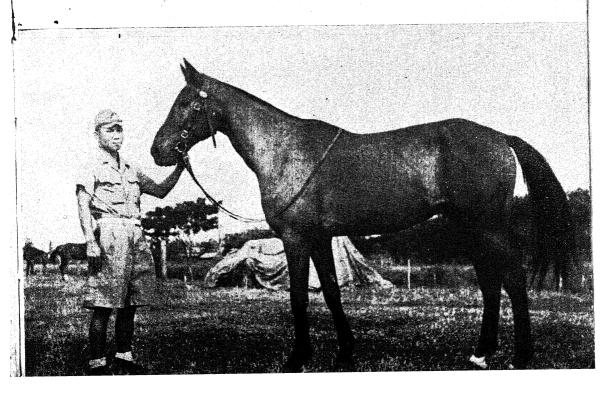
Our first inspection was at Bangkok, where the Japs had 510 animals; all were in poor condition, many being in an appalling state. A few were lying down quite unable to rise, while many had festering and fly-blown sores on withers and ribs. Almost all had overgrown feet, dropped soles, and signs of thrush. Over two-thirds were selected for immediate destruction. The disposal of such a large number of dead horses was in itself a problem in the monsoon conditions as the water level was only two feet below ground, but it was solved by digging deep pits on the top of a rifle-range butt. The animals were led up on it, shot, and pushed over—an unpleasant experience.

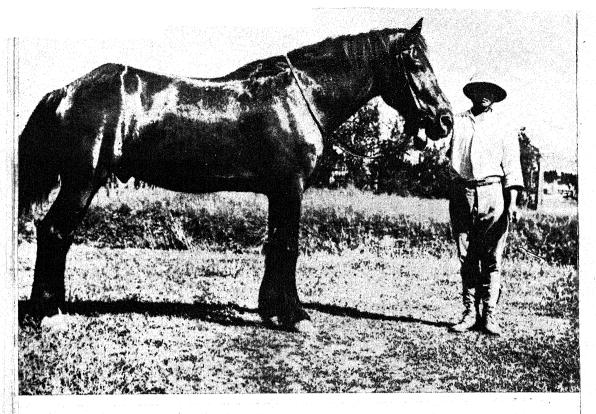
The Japs had rudimentary ideas on animal management, but owing to the terrible climatic conditions, indifference of their officers, and lack of "horse-knowledge" amongst all ranks, animals were pitifully looked after. Horses, to them, were merely another method of transport, and suffered the same ill-treatment as Jap cars and trucks. They were kept on undrained standings with no bedding. Tight head-ropes were common, and no grooming was ever done, although boxes of unused brushes and curry combs were found later in the men's



Above: A Jap single draught A. T. Cart. Note the pressed steel wheels.

Below: The best horse we found in SIAM. This one had great scope and jumped very well.

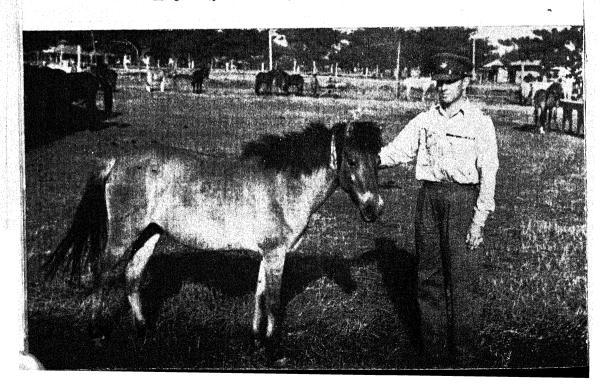




Above: Our biggest find—used single draught in a high wheeled cart.

It was 17.2 hands.

Below: The best Siamese pony we found. This type is about 11 hands; they are called "midgets" by the Siamese, who race them extensively.



barracks. Manes and tails were long and matted. Veterinary attention was skimped, and seemed to consist only in the application of mercurochrome to all sores and cuts; yet there were ample stocks of veterinary equipment all packed in beautifully fitted field chests.

Farriery equipment was excellent, a set consisting of two neat Yakdans fitted with full tools, an anvil and a built-in centrifugal blower. The shoeing, however, was bad, all the usual faults being common, i.e., bad dumping, cutting away of heels and frog, high unaccessary nail holes, and rasping of the outer hoof walls.

The Jap soldiers showed several instances of being fond of their charges, but in curious ways. They could sometimes be seen squatting in front of a norse, hand-feeding it with offers of green grass, yet at the same time they seemed to ignore a cut mouth or a weeping eye. They gave their animals no bedding, but there was an issue of sun-hats for the horses—large discs of canvas-backed matting with ear-holes and a throat-lash. As a final instance—when the animals were destroyed many Japs stood at attention and saluted as the horse went down and some wept.

Jap soldiers were educated, and N.C.Os in particular were fond of paper work. They all carried satchels, buckled to their belts, in which were notebooks, writing paper, coloured pencils, and often a Jap-English dictionary. In consequence elaborately written feeding charts, notices as to hours of parade, and rules for work and behaviour were much in evidence. These were pinned up prominently in every basha and living quarter. Army orders were painted (usually with coloured chalks) in meticulous picture-writing on blackboards.

This efficiency was carried to extremes. If, for instance, they were asked to say how much fodder was left, they would prepare an elaborate statement in English copper-plate writing, showing amounts issued, consumed and required by day, week and month for one horse, all totals being shown in English measure, though their own system is metric. A N.C.O. would sit up all night to do this, and would present it next morning with much bowing and hissing. This hissing eis really a quick intake of breath and is an automatic expression of humility and respect by an inferior before talking to or taking leave from a superior.

General discipline was so good that it was almost alarming. All orders were obeyed with a snap and on the run. Saluting was immediate and on sight—though the officer might be 200 yards away. A man carrying a load would drop it, salute, then pick it up again—or if without a hat, would bow deeply despite his burden, then proceed.

In Bangkok advantage was taken of this discipline and willingness to work by showing the Japs our standards of horse-mastership and stable management. Once they saw what was required of them they worked with a will. They were organised into a unit of two troops of four sections each, under their own officers, 45 men in all, and were taught stable routine for grooming, feeding, etc. They called themselves the "Horseguard Corps."

One indifferent interpreter was available at intervals, so most of the work had to be demonstrated by example. After a British Remount officer had groomed a horse in front of them they soon "caught on" and vied with each other in producing a shine on their horses. It was amusing to hear later that there had been much comment about this in their barracks, as it was inconceivable for a Japanese officer to instruct by personal example, let alone touch a horse to clean it.

Most of the Jap animals in Bangkok were pony stallions, and as the prisoners were required for dock labour, and only 45 men could be spared for Remount work, it became difficult to look after the captured animals in their standings, so it was decided to build paddocks for them. These were laid out on the usual Remount "kraal" system and were built without R.E. stores or assistance.

Timber, wire, roofing, etc., were "scrounged" from old bunkers, pillboxes, and disused huts, and a design was drawn by a Remount officer from which the Jap N. C. Os produced their usual over-elaborate plans with scales, distances, etc., all beautifully drawn in coloured inks. The work was well done, and soon this unit had built a small depot, complete with six paddocks, a stable of 20 looseboxes, saddle room, office and grain store. A riding track, small school and a set of jumps were added later.

Inspections similar to that carried out at Bangkok were made at other Jap camps throughout Siam by Remount and Veterinary officers. Altogether 5,227 animals were inspected, of which 3,691 were destroyed, 1,536 being retained for disposal. Thus 70% were destroyed, and 30% retained.

Many varied types of animals were found in the Jap Army in Siam chiefly owing to the fact that they had received no reinforcements from Japan, and had made up deficiencies by capture or purchase. They were able to show receipts of all purchases from the Siamese. Here are some of the animals we found:

Japanese Horses.—These were bred in Japan from mixed Jap blood. About half were rides over 15 hands, used by Jap officers and N.C.Os. The remainder were transport horses of Percheron and heavy waler stamp, and were used in high-wheeled single draught carts or in pair wagons. About 80% were chestnuts; no greys at all were found.

The riding horses were only half-schooled as judged by our standards—with little flexion and rough paces. They were, however, all very quiet to mount and ride, and could be grazed at liberty and caught up at will. The Japs u ed. them merely as a means of transport to march from A to B, and never attempted jumping or school work. In the course of selecting rides for British officers, a Remount officer rode 150 of these horses and found them all very quiet—a particular feature being the way they stood quite motionless when mounted, without being held.

Chinese Ponies.—These were of two types: (a) North China (Manchurian) shap less animals about 13.3 hands, with a long, curly coat, roach back, good bone and uncertain temper; they were used entirely for pack work, and (b) South China—a lighter type used for pack work and riding—rather like Kashmiri ponies, but with heavier heads and thick coats.

French Indo-China Ponies.—A light narrow pony, about 12 hands, the same stock as Siamese, but showing a trace of European blood. Many skewbalds, piebalds and duns, but few true colours. A useless type of pony; very excitable and perpetually kicking and screaming, possibly because they were all stallions.

Java and Sumatra Ponies.—These were a mixed bag, some being captures from the Dutch Army, and some obtained from the villages. A light pony, about 13 hands, with a breedy head but rather leggy, with cow hocks. Could be easily recognised as all had prominently split or nicked ears. As rides they were fast, but also nervous and difficult to handle.

Siamese Ponies.—The smallest ponies seen. Known as midgets in Siam, they average 11.2 hands. The Japs used them in small, single draught carts, or as light pack ponies, for bedding rolls, etc. The best were like miniature New Forest ponies; they were extremely hardy, were fed only on grass, and had a very fast pacing trot when ridden.

Burmese Ponies.—A few only were found, brought back during the Jap retreat. They were a light type of 13.3 hands, and were probably captured from Burma Police or Frontier Force.

Indian Ponies.—Two were found, both bearing the "Mona" brand. They were in poor condition, and were destroyed.

Mules.—A mixed bag. A few Indian mules were found, but the majority were Chinese of a poor EI or EII type. Of all the mules found, very few would have been acceptable by our standards.

JAPANESE SADDLERY

SADDLES made in Japan were very similar to the British Officers' pattern issue saddle, but had neat detachable pannels, which obviated re-stuffing, provided the new panels were available. They had prominent knee-rolls, and were only comfortable if ridden with long leathers. Bridles had a civilian-type curb and bridoon bit, with "rising-sun" brass bosses. Head collars were of string and webbing, worn under the bridle.

A. T. PACK SADDLES were similar to ours, but had adjustable arches and shaped sidebars. The Japs said that this saddle caused few galls, and that the majority of injuries come from the Chinese "X" pattern pack saddles of rough wood, which they had been forced to use of necessity. A. T. Carts were single draught. Those made in Japan were good, with pressed steel wheels and turned shafts. The larger ones had platform bodies only, not with side rails, as on our A. T. Carts. Many, however, were Chinese carts, with wooden wheels and axles.

The Japanese 37th Division was at Nakon Nayok, a hundred miles north of Bangkok, and it was here that out of 2,699 horses seen, 2,154 had to be destroyed. It was such a large proportion that we investigated the reasons, which were:

- (i) This formation had marched by road the whole way from North China to Siam, a distance of 3,500 kilometres;
- (ii) It was at Shia-Chia-Chaong, S.W. of Peiping, when it received orders to march south to link up with the Southern Forces' drive on the American Airfields in South China;
- (iii) It covered the distance in four months, averaging 30 kilometres (20 miles) a day, marching six days a week.
- (iv) En route it fought two battles near Changsha, and it was this force that re-captured Kweilin. Moving south it crossed the top of French Indo China at Vientiane, and from there went through Siam to Bangkok.

Animal casualties in this Division were heavy. Killed in battle numbered 220, died 700, drowned 10, destroyed as unfit 150. These 1,080 animals were replaced by captured Chinese and French Indo China ponies, no reinforcements being received from Japan. South of Hankow no Army fodder supplies were forthcoming, and all grain and grass had to be obtained locally.

The Japanese stated that owing to the speed of the advance and the tiredness of the troops, the horses seldom got more than two feeds a day. Of the ponies they acquired, the Manchurian type stood up best. On our inspection they were the least emaciated, and had I ss galls than other types.

While resting at Bangkok, this Division received orders to move south to selected points on the West coast of Malaya, but the war ended before the move started. Later, when examining their maps, a British Officer who had recently been on the S.E.A.C. Planning Staff, said that their marked destination was to have been the main landing area for our attack had it taken place. We repeated this to the Jap officers, and they showed very great relief—and amusement.

The Jap 15th and 33rd Divisions were at Nakom Patom, sixty miles west of Bangkok. These divisions had borne the worst of the Burma campaign, and were in very poor shape when they got back to Siam. The remnants were magnificent troops, and their discipline was high, even by Jap standards.

Their animals had had a bad time, and their records showed that they lost 5,000 on the retreat from Kohima, mainly from hunger. They ran out of food stocks, and as a result their animals died like flies, all along the escape route. The senior Jap Veterinary Officer said that only five horses returned from the original number at the beginning of the campaign. He also said that the best animals they had were the mules they had captured from the British forces.

A survey of the animal requirements of the Siamese showed that riding horses were required in Bangkok by the Siamese Army for remounting their 1st Cavalry regiment, that small ponies were wanted in the up-country districts, and that a few small ponies were required by the Pasteur Institute for serum manufacture (anti-snake bite). Sales by auction and private treaty were arranged, and two hundred riding horses, and 958 pack ponies and mules were sold. The highest price realised was the equivalent of Rs. 1,371 paid for an ex-racing mare the Japs had acquired. The total amount received was Rs. 67,906.

In addition to the above animals, the Japanese had a few Army dogs, three of which were captured. They were good Alsatians, bred in Japan, and were used for guard duties, being trained to attack any man indicated by their handlers. They were sold by auction and fetched high prices, averaging Rs. 577 each.

Calcutta Mint to Strike Campaign Stars

Campaign medals for issue to the Indian Services are to be struck in the Calcutta Mint. The designs for the eight awards—1939-45, Atlantic, Air Crew Europe, Africa, Pacific, Burma, Italy, and France and Germany Stars, were prepared in the Royal Mint and have been approved by the King.

The Stars are to be struck in a yellow copper zinc alloy. Each is a Star of six points, 13 inches across between the extremities of the points. In the centre is the Royal and Imperial Cypher G.R.I., with the numeral "VI" below, the whole surrounded by a circle with the title of the Star, and surmounted by a crown.

No date has yet been fixed for the issue of Stars to Indian Services personnel. In the United Kingdom, where work has already begun in the Royal Mint and is about to start in the Royal Ordnance Factory, Woolwich, it will be two years before the striking of several millions of medals is completed.

A YEAR AS A C. L. O.

By LIEUT.-COLONEL T. M. CARPENDALE.

FEW tasks in India can be so full of interest as that of the Civil Liaison Officer. He is daily in touch with old soldiers, and with their families; he finds loyalty and genuine friendship on all sides; and he is able to smooth out many of the difficulties which confront the soldier and his family. What happier job could you wish to have?

My area as C. L. O. of the Western U.P. covered that vast tract of country lying between the Jumna—down as far as Agra—and the Ganges; stretching north from Dehra Dun to Agra, thence across the Jumna down to Lalitpur; eastwards it included the Garhwal and Almora hill districts. Altogether the district was about 460 miles in depth and 200 miles in width.

All touring had to be planned well in advance, but large tracts had to remain unvisited. Nevertheless, visits to outlying areas brought so many useful results that the time spent was amply justified. Three C.L.Os and their Welfare Workers assisted me. Our duties were to investigate cases concerning pensions, prisoners of war, family allotments, relief, etc., and keep in touch with District Soldiers' Boards and Collectors.

Touring was particularly hard in the hill areas of Garhwal and Almora. Welfare Workers had to plan their tours weeks ahead, many villages being a full day's march apart, and across steep valleys and mountain ranges. Some of these Welfare Workers were excellent—conscientious, keen and with a fine spirit; others were not so suitable. Although supposed to work for love and payment of out-of-pocket expenses, some extra monetary compensation was essential.

Loyalty and devotion of the old soldier were two of my happiest memories of the work. The fact that an officer of his regiment was coming to visit his village made many a pensioner dig out his uniform and extend that hospitality for which the Indian villager is famous. Once my wife and I were surprised to find a couple of hundred old Indian Officers and pensioners waiting for us. A pukka barra khana had been fixed at the dak bungalow, complete with the inevitable roast duck and even peche melba.

That particular area had been a recruiting centre for my father's old regiment as well as my own. Among the assembled jawans was one of 103 years of age—a fine old tough—who had walked in three miles to find out "which of the biba-log" I was. He had been my father's orderly in the 1879 Afghan Campaign. When asked his unit, he would not admit to any other than the "2nd Regiment"; the "2nd" (the 2nd Scinde Horse) was to him the only regiment worth mentioning.

He was the eldest of four of that Regiment whom I saw on various occasions. All were over 90, and yet hale and hearty. Many an hour we spent talking over old times, changed customs, etc. A daffedar who had been with me in Aden, a Rissaldar I had known on the Euphrates, an N.C.O. of the 23rd who was with me and Egerton when the latter was killed at the battle of Huwaish—they are some whom I met. Then there was a Subedar-Major who had been with my brother in Persia; an old pensioner of the 8th who had been our specialist trick

rider when I was Adjutant and who now hobbles round on crutches owing to a fall off a bicycle—"Bahut sharm ki bát hai, Sáhib, kih main cycle se girgaya." There he is now, with a snow white beard down to his waist, but as vivacious as ever. At Jelalabad I met some old Cavalry soldiers, one of whom chided me for not recognising him as the man who had taught me to ride some 38 years before on joining the 8th when I was a "bilkul bacha Sahib."

The most touching evidence of the faith of these old pensioners was shown by an old Jat of the 14th Lancers at Bulandshahr. He had come in to have a translation made of a wireless message from his son—a P.O.W. in Japan—and to have a reply sent. I was able to arrange it, and as his son had been in my regiment he was very grateful. As I was going away he hobbled after me and brought his wife, who had already sent three sons to the war, two being prisoners in Japhands. "Sahib", he said. "Ek aur arz hai". "Say on", I said, "What is it?" "Only this—that when my sons come back from the war, will you arrange for a Belaite bája to meet them at the station, march them home, and play God Save the King"." There you had the true Indian soldier.

Not all sides of the work were so pleasing. There was the inevitable tale of corruption on the part of junior officials and banias. Such stories were tragic, infuriating and depressing. Take, for example, a so-called "deserter". Arrested as a suspect by the police and put in jail, he might wait three weeks for the investigation by the local magistrate. Often the latter gentleman could have hastened matters—and often a more effective examination in the first place would have revealed the fact that the man had his discharge certificate on him. That kind of thing frequently occurred, and it should not have been so.

The deserter question was, of course, difficult. A "professional deserter" would enlist in a fictitious name, and desert; another man bearing the same name would be arrested and put in jail, and could not be released without a Magistrates' order or an identification escort from the unit the professional deserter had enlisted in, and that unit might well be in Burma. Many of these difficulties have, however, since been cleared up.

Many cases of these so-called deserters had arisen owing to a defective system of recruiting. Evil practices had crept in, and some old I. Os were very bitter about it. One I.O. had brought up three excellent recruits; they were not accepted in his name, but in that of a local bania, who hoped thereby to see his name among those selected for Honours. He paid Rs. 5 per head to men who brought in recruits in his name.

"Paid Recruiters" sometimes overstepped the mark. On one occasion three exceptionally good men were accosted at Delhi Railway Station by a paid recruiter when on their way to join a I.A.C.C. unit, in which they had relations. The P.R. told them he was the man to take them up. He took them to Ambala, enlisted them as "water carriers" and returned with them to Meerut for posting as "water carriers" in 'Pindi. Fortunately I was informed and the men were transferred to the Corps they wanted. Had they not been so transferred they would have gone to 'Pindi as water carriers, there found out the mistake, run away, and would later have been caught as "deserters".

Many women workers have been enrolled for village welfare work and for investigating cases concerning soldier's families. Has the scheme been financially sound? I doubt it. Few Indian women can enter any village where they are not well-known, without an escort or companion. And when they do

enter such villages they are apt to be received with suspicion, and the result is that their real influence is not very great. Even when they do make contact they cannot maintain it unless they are inhabitants of that village or people of influence.

The only women I met who were trusted were wives of British and Indian officials, a number of school mistresses, and some missionaries, whose work is especially valuable. The latter's work is not encouraged, however, because it is feared that they might be trying to proselitize the local inhabitants. That women are urgently needed for this kind of liaison work is manifest, but the solution, I am convinced, is to train them in village areas—one per village or group of villages; these would be more valuable than itinerant welfare workers.

Even in big places like Meerut and Moradabad, the number of Indian women who come forward to help in their own Indian hospitals is very small. Until a change is made in the educational system, and women become "nurse-minded" the number will always be small. Many women are keen and anxious to improve matters in their areas; in two places I know the local rani had organised, financed, and worked up some excellent training schemes for men and women in village industries and general rural development. But for outlying villages, the only person the villagers can rely upon is the missionary or schoolmistress or the wives of—generally—British officials. It is a sad reflection on Indian education.

And another sad reflection on Indian education is the amount of bribery and corruption found in the relations between junior officials and peasant villagers. Plenty of opportunities exist, and I am afraid the patwari comes in for his share of criticism on this count. Education of the right kind would undoubtedly remove this blot of bribery from Indian life, but it will take time. There are, however, signs of real progress in many directions.

First I would place the Rural Development Association. I had the privilege of staying with one of their leaders, Rai Bahadur Captain Kashi Nath, of Lucknow. He is an enthusiast, and in the villages in his group I found his enthusiasm had been infectious. In one village I saw a 25-year old Rural Development official; he had had the village streets paved, a malaria swamp cleared, a village school organised, built a co-operative store, established a library and started a Boy Scout troop. He had also arranged for the *Panchayat* to agree with the villagers to consolidate their holdings, so that each farmer had one compact plot of land instead of many small patches.

One day each month was set aside for a Fauji Day. That was the day when all soldiers families could be present and arrange for their troubles and problems to be investigated, letters written or translated, allotments checked, and news conveyed concerning the welfare of P.O.W. relatives. He had persuaded the villagers to give up one day each month to work free on some scheme of improvement in the village. What a proud record! And the cost to Government was his pay—Rs. 25 per mensem!

In another village I found the Rural Development worker had instituted counter-erosion work by planting a small forest on otherwise waste land; by widening the village street and thus giving more light and air throughout the village; by improving the poultry stock; and by starting village industries, such as cloth stamping, weaving, etc., all of which would give lucrative employment.

These Rural Development "workers" are trained in camp, and I was much impressed by their keenness and spirit, and by the immense possibilities

for good in the movement, if it is properly supervised, controlled and financed. This type of Rural Development Association undoubtedly offers an opening for cradicating the more depressing features of Indian village life. During the War some old soldiers looked on the Association with some disfavour, believing it had certain political leanings; the staff, too, might occasionally have been selected with a little more care, for one black sheep might well affect the reputation of the whole Association.

At present it can only influence a small proportion of the population, partly for financial reasons and partly owing to lack of confidence of their future activities. When those two factors have been adjusted, however, and a chain of these Associations have been established throughout the length and breadth of India, they can do an immense amount of good work. Funds spent on the movement will yield good returns. Supervision is, of course, essential, and it could be well carried out by A.C.L.Os in conjunction with the "workers" of the Rural Development Association.

What lessons can be learned from the experience I had as a Civil Liaison Officer? First, I would refer to the existing system of investigating petitions from soldiers and their families. In my opinion it is not only cumbersome but unsatisfactory in many ways. It throws an enormous amount of extra work on an already harrassed Collector, who has to refer it back through the usual channels to the village for report. In the Army, cases are investigated from the lower formation to the top, and surely it would save time for the Collector to get his reply direct from the village rather than through the D.S.B., Tehsil, and Patwari?

The solution is a Panchayat in every village. A Panchayat is composed of men selected for their experience and energy; they know the intrigues behind petitions; they know the family history probably better than the Patwari and could in most cases settle matters without even referring to the D.S.B. They are the people to furnish an unbiassed report on cases. Records of cases would have to be kept and checked but it would all give the elders a sense of responsibility in public affairs as well as imbue them with an added sense of izzat. Civic pride would be developed; the women workers could work under the protection of the Panchayat; and in numerous ways the members could smooth the path of the ex-soldier.

The second important lesson I learned, as have many others, was the need for checking the corruption and extortion which exists in many parts of the country. What punishment is meted out to the junior postal official who holds up payment of allotments unless he is paid extra? What is done to the railway babu who gets a useful income from refusing to issue tickets unless he is duly rewarded? Apathy is at the root of the trouble, and it must be admitted that the results of individual effort to stamp out the evil are disheartening. We need a nation-wide drive to stamp out this evil.

Another important feature in Indian life is the value of missionary organisations, and the influence of touring British officers and their wives in villages. Any British officer who has visited villages from which his men have come knows the warm welcome he always receives, and he knows how deeply the old soldier, or the parents of serving soldiers, appreciate the interest shown in them.

I would suggest that the following ideas merit serious consideration.

1. I.A.C.L.Os should be appointed to supplement the A.C.L.Os, the strength depending on the military personnel recruited from each area. They could be of the retired I.O. type, selected for their keenness for the work and not

necessarily for their war record. Pay could be met by abolishing C.L.Os appointments and perhaps reducing pay of highly-paid officials.

- 2. The A.C.L.O. system should be affiliated with the Rural Development Associations. If that is not possible, there should be a link-up between the Association and the A.C.L.Os, the latter supervising the military side of the Rural Development Association activities.
- 3. The *Gram Panchayat* system must be expanded, and Units should be asked to send their petitions to the *Gram Panchayat* instead of to the A.C.L.O. or D.S.B. This, however, would take some time, as until the *Gram Poonch* has its organisation on firm lines, petitions would be untraced and untraceable.
- 4. Missionaries should be encouraged to contact soldiers' families. Many missionaries are keen to do this, but they have no literature or information on how to deal with soldiers problems.
- 5. Sevadarnis and missionaries should be encouraged to attend "Fauji days" where they are being held. They might also be encouraged to form teams of workers to assist village uplift schemes.
- 6. A.C.L.Os should be given added official status and attached to the staff of Collectors. They might also be given certain powers by the Collector to assist him in dealing with the numerous petty cases where military are concerned.

Finally, the Indian Government that is to be must organise and develop this rural development system, combining with it resettlement schemes for old soldiers. In that way a peaceful, contented, and happy India will result, and the first truly Indian Government will be able to show the world that they are worthy of the task of raising it peoples to higher standards of living.

Awards to Indian Army.

About 6,400 awards have so far been made to the Indian Army for gallantry and meritorious service during the war. Awards, for gallantry alone total over 4,800. These include 31 Victoria Crosses, five George Crosses, 253 Distinguished Service Orders, 354 Indian Orders of Merit, 1,396 Military Crosses, 1,197 I.D.S.Ms and 1,646 M.Ms.

The Infantry has earned about 4,000 awards, including 29 V.Cs, two George Crosses, 123 D.S.Os, 200 I.O.Ms and 704 M.Cs, while the Royal Indian Engineers and the Royal Indian Army Service Corps each have about 350 awards to their credit. Of the 300 awards won by the Indian Armoured Corps two are George Crosses, 21 are Distinguished Service Orders and 90 Military Crosses.

The invaluable and gallant services rendered by Army doctors to front line troops have earned the Indian Army Medical Corps 140 awards for gallantry alone, among them eight Distinguished Service Orders and 73 Military Crosses.

Over a hundred awards go to the Indian Signal Corps. One Distinguished Service Order and eight Military Crosses are among them.

The Royal Indian Artillery have over a hundred awards which include one Victoria Cross, six Distinguished Service Orders and 38 Military Crosses.

HOW TO CONDUCT TROOP TRIALS OF W. & E.

By Lt.-Col. A.E. BAGWELL PUREFOY, p.s.c., R.A.

BEFORE a new weapon or other piece of equipment can be introduced into the Service it must pass not only technical trials, but also trials in the hands of the troops who will have to use it. To name only two reasons for this, technical trials are usually conducted by experts in the use of the equipment in question, whilst the troops for whom it is intended are nothing like as expert, and will probably use it under much less comfortable conditions.

Secondly, faults that the technical trials are designed to show up are often different from those which are brought out by a troop, or "user" trial. For example, a portable filter that has a very satisfactory output in the hands of the technician may well give a much poorer performance or even break up altogether, when worked by a hot and tired private soldier who is being bitten by leeches. Again, a device for clipping hand grenades on to the soldiers' belt may have admirable strength, springiness and rust-proof qualities, but may prove a menace when projecting sharply from the belt after the grenade has been removed.

Troop trials in the past have not always been carried out with the thoroughness they deserve. This has been due to a faulty realisation of the steps necessary to ensure a really useful trial. "Send it to the troops and see what they think of it" is a recommendation that has preceded many former troop trials. What has been the result? A formation has been selected, a hundred or so samples of the item in question have been sent to it, together with a questionnaire (often framed by a harassed staff officer already overworked), and the two have been passed on to various units. These units are busy training—or perhaps even fighting—and they are unlikely to be able to afford the time and thought that a trial demands if it is to be of any real value. The trial is regarded as a tiresome fatigue. The result is almost always merely an expression of opinions, and as often as not the opinions expressed by different units are diametrically opposite.

What are the essential principles in the conduct of troop trials? First, they should be planned and supervised by people who are specially qualified to do so, and, equally important, who have the time to do so. Even where such people are not available, however, troop trials would be improved if the principles suggested were followed as closely as possible. This article is based mainly on experience at the User Trial Establishment, India, which was formed late in 1944 with the object of overcoming the difficulties that had hitherto been met in the conduct of troop trials. In the first year of its existence over fifty such trials were carried out.

If trials are to be run by specially qualified officers, those officers must be grouped in a unit or establishment where they can carry out their work with the minimum of outside assistance. Trials make demands on troops over and above their ordinary work, and if troops are to co-operate willingly—which is essential to success—the trial staff must be as self-supporting as possible in such things as transport, special equipment, and skilled tradesmen. The officers should possess scientific degrees (including a physicist, a chemist, a mathematician and an engineer) and be drawn from various arms of the Service.

At the Indian establishment Engineers, Infantry, Signals and Ordnance were found to be particularly necessary. Many trials have a medical aspect,

so the staff must include a medical officer with experience of problems of human physiology. He will require a laboratory fitted with simple equipment. The other ranks should include as many different kinds of tradesmen that the powersthat-be will allow, but a carpenter, metal worker, equipment repairer and draughtsman are indispensable, as well as an adequate staff of clerks. Equipment, besides that implied by the personnel already mentioned, must include stop-watches, cameras, a dark room and a calculating machine, as well as general measuring instruments. Such an establishment must, of course, be situated reasonably close to troops of various arms, and within reach of different types of country.

Whether a trial establishment exists or not, it is important that orders for treop trials should be received from one source only. This sounds obvious, but the point has been found in practice to need careful watching. Divergence from it is bound to lead to confusion: not only do the recipients of the demands become the victims of a tug of war on priorities, but the practice also leads to trials being asked for without the knowledge of all the concerned branches of the staff.

A trial demand, after clearly stating the Object of the trial, should leave the addressee considerable latitude in how to conduct it. It should resemble an instruction rather than an order. The preparation of trial demands is not easy, and a bad one will cause delay and possibly even a bad trial. If, for instance, the Object of a trial of a new waterproof cape is given as "To consider whether the new cape is a suitable substitute for the U.S.A. quality", when there are, in fact, no U.S.A. capes available with which to compare the new one, only confusion can result. Yet this may easily happen if care is not taken.

Again, delay and confusion will be avoided if a trial demand always includes the specifications of the article under trial. The writer of the trial report then knows the correct name of every part, and of what material it is made; there will then be no doubt regarding what item any particular comment refers to. In addition, full details of work already done, perhaps in the Dominions or other countries, should always be supplied when available.

The following headings have been found suitable for most trial demands:

ITEM FOR TRIAL.

PRIORITY (ONE OR TWO).

DATE REPORT REQUIRED.

OBJECT OF TRIAL.

PARTICULAR POINTS ON WHICH REPORTS ARE REQUIRED. (This does not mean that there are no other points on which reports are desirable).

Special Instructions or Information. (e.g., specifications; where the stores are coming from; details of trials already carried out, etc).

VISITORS TO THE TRIAL.

SECURITY INSTRUCTIONS.

Immediately a trial demand is received, it should be scrutinised very carefully, in order to determine whether any queries regarding it are necessary. The demand may arrive some time before the equipment, and time will be saved if obvious doubtful points are raised at once. Taking the waterproof capes mentioned above as an example, the Information section of the demand might that 50 new type capes were being despatched from C.O.D.

The trial establishment—or unit—should immediately point out that in view of the Object of the trial an equal number of U.S.A. type capes would be required. It is generally wise to postpone further action on the demand until either the stores have arrived or their arrival is imminent. Time will then be saved if the demand is then examined in the light of a standard questionnaire, such as the following:—

- (a) What priority should be given to this trial, relative to others already on hand? (If the higher H.Q. are wise, they will lay down only two priorities: (i) meaning that the trial must be carried out immediately, if necessary at the expense of others; and (ii) meaning that the trial establishment has discretion when to carry it out, but that if possible the report should be ready by the date given).
- (b) Has enough basic information been received? (Some may have been asked for on receipt of the demand, but more may well be required after the equipment for trial has arrived and been examined. To judge from experience, the answer to this question will often be No, but this need not necessarily delay the start of the trial).
- (c) What steps are necessary to answer each question? (Very broadly only; leave the details to the O. i/c trial).
- (d) Are any further questions desirable? (Often Yes; that is why the trial establishment should be allowed plenty of latitude).
- (e) How many men will be required? Of what nationality, what arms, what sizes, etc? (Again broadly only; O. i/c trial will decide the details).
 - (f) For how long will they be wanted?
 - (g) What officer should be in charge of the trial?

Before the trial is launched a clear instruction regarding how it is to be carried out should be issued in writing to the officer in-charge. There are several reasons for this: to show the officer and his assistants the exact task before them, to guide any new trial staff who may have to take over during the trial, and to be filed for reference in case of similar equipment coming—up for trial later on. Sometimes, also, the troops who are to take part find it a help to see the trial instruction. Standard headings such as Informaton, Object, Method, etc., should be used, and generally the best plan is to let the O. i/c draft his own instruction, discussing it with his superior before it is reproduced.

On the trial instruction will depend whether the trial gives results that are of value or results that are worthless. Concrete facts, such as measurements, where these can be obtained, are more valuable than opinions. The instruction, therefore, should lay down method designed to obtain such facts. This is a vital principle in the conduct of troop trials, and it is here that a team of specially trained and equipped officers has an advantage over unit officers already busy with other tasks.

If, for instance, it is desired to find out whether equipment "A" is more tiring than equipment "B", one approach to the problem is to make a party of soldiers use both equipments and then say which tired them most. But this method yields opinions only, not facts. Facts can better be obtained by a careful comparative assessment of factors such as timings over a course, pulse rates and sweat loss. The facts thus found will be of more value for showing which is the most tiring equipment than mere opinions alone.

Another point in the design of trials, where special knowledge is needed, is that of "randomization"—e.g. deciding which men will march with which type

of equipment, or in what order a man will fire a number of different weapons. This, if properly carried out, reduces to a minimum the likelihood of the results being due to outside factors, such as variation between men, and the fact that a man's efficiency improves with practice.

The number and nature of troops required for trials will of course vary considerably. Quite apart from the number of equipments that happen to be available, questions arise regarding arms of the Service, characteristics of men, nationality (e.g., British or Indian) and degree of training, how many expert and how many "average" shots, for instance. In 1945 a trial of wireless sets that took a month to complete needed only ten B.O.Rs, while another, of gas masks, though finished in ten days, required a hundred men from each of four battalions, British, Gurkha, Sikh and South Indian. This point must be decided during the detailed examination of the trial demand.

Whether the troops are detailed by a formation that has been ordered to carry out the trial, or whether they are produced at the request of a trial establishment, it is essential that their "goodwill" be enlisted. Without it a triol cannot be called a fair one. It is extremely easy to obtain; all that is required is to arouse their interest. Once they realise that the adoption or otherwise of an item depends largely on the trial they are to carry out, they will gladly co-operate, however unpopular the item may seem. A particularly unpleasant trial of woollen vests, which of necessity had to take place during an Indian April, is recalled, but the B.O.Rs' natural humour rose superior even to this. Provision of tea and other comforts, such as drying facilities, will help to make a strenuous trial popular.

Few trials are spectacular; most are definitely dull. Therefore visitors should be discouraged, unless they are technical experts who can play a useful part in the work. Non-technical visitors who come in the hope of seeing an interesting display will either be disappointed, or may interfere with the trial by trying to make the officer-in-charge turn it into a demonstration—a very different thing.

If the trial instruction has been carefully prepared and the troops approached in the right way there will be no difficulty in launching the trial. The officer-in-charge will often need one or two assistants for such tasks as taking times, noting pulse rates or recording measurements; any intelligent N.C.O. can do these things, and they form a useful secondary task for the establishment's tradesmen, who soon become very good at them.

Although the officer in charge will invariably set himself a target date for completing a trial, he must be prepared to prolong it if necessary. Moreover, it is important that higher authority should realise that factors may arise after a trial has started which necessitate such prolongation. Two examples of this will suffice. The equipment may prove unsatisfactory as it stands, but the trial may suggest ideas for modifying it, thereby eliminating its previous drawbacks. In the case of a small item, such as a clip for hand grenades, the trial may suggest that a completely different device may be more satisfactory. It will often be possible for such minor modifications to be carried out on the spot, in which case the trial should be prolonged to allow of their being tested.

A second possible reason for prolonging a trial is that some completely unforeseen factor may appear during its course, necessitating special investigation. This occurred during a trial of a new type of web equipment. Towards the end of the trial as planned the suspicion arose that, despite the many advantages of the new equipment, men who were it on a long march sweated more than

those wearing the old type. This being an important factor in the tropics, it was necessary to arrange a special march, and the results proved beyond doubt that some feature of the new equipment caused a significant increase in the amount of sweating.

Opinion surveys.—In spite of what has been said regarding the desirability of obtaining concrete facts rather than opinions, the latter will sometimes provide the only light that can be thrown on a problem. Again, opinions often form a useful addition to the evidence provided by the facts. The two principles to be followed in collecting opinions are, first, avoid leading questions, and secondly, whenever possible, do not obtain all opinions from one body of men. For example, in a trial of an equipment of which only ten samples are available, do not use only one infantry section on the trial if you want opinions. You will obtain much sounder results if you repeat it with several sections from different companies, or preferably from different battalions. The opinions you get will not then be influenced by one strong personality.

Analysing results.—It is nearly always necessary to subject the results of a trial to statistical analysis. If this is not done quite false deductions may be made from them. This is due to the fact that the size of a difference between two mean measurements is in itself no guide to the significance of the result.

A good example of this occurred in a trial of lightweight motor cycles compared with heavy machines. A number of runs were made by both types over a severe cross-country course. Although the means gave a difference of four minutes in favour of the lightweights, the individual timings were so irregular that at first sight it seemed that no reliance could be placed on this result. The heavyweights, for instance, achieved on two runs, times of 15 and 16 minutes, while the lightweights' runs included timings of 19 and 22 minutes. Yet statistical analysis showed beyond doubt that the probability of the mean difference being due to chance was less than one in hundred. This enabled the firm conclusion to be drawn that over rough country the lightweight cycles are superior.

Contrary cases, where results look conclusive, but on analysis are found to be not so will occur even more frequently. The need for a mathematician on

the trial staff is thus clearly shown.

TRIAL REPORTS.

The first thing to bear in mind when preparing a trial report is that it will be hard to get people to read it. It will arrive on the desks of highly placed officers who are busy with other work, and reading a long report will be to them a considerable added labour. If it looks solid and dull it will not be read as thoroughly as it deserves. Should this happen it would be a calamity; not only has a great deal of work gone into the trial—work which merits full attention—but insufficient study of the report may lead to wrong action being taken as the result of the trial. Therefore it is worth while taking great trouble over producing a trial report. In this connection a good slogan is "A demonstrator aims at selling what he demonstrates: a trials officer aims at selling his report".

A report on a trial should therefore look attractive and readable. Long, solid paragraphs with no illustrations or diagrams should be avoided. Include plenty of photographs; these should be well mounted, have useful captions, and appear opposite the pages to which they refer. More—on looking at the reading matter it should be easy to find the part dealing with the photograph. A rather unwilling reader may have his attention caught by an interesting picture, and may turn to the opposite page in an endeavour to find the story that it illustrates. If, say, the words "(see photo No. 6)" are clearly visible, he will have no difficulty

in finding what he wants. Attention to small details like this plays a real part in getting reports read and thence in ensuring that the right action is taken in them.

The next thing to remember about a trial report is that, while the trial has—we hope—been scientifically run, the people who are going to act on the result of it will often not be scientists but General Staff officers. This means that the body of the report must be worded in language that is intelligible to the layman. It is, therefore, most important that before it goes to press it should be passed as intelligible by a member of the establishment who is not a scientist.

Sometimes amusing situations arise out of this. The report may contain a sign or expression that is common language to the expert but unfamiliar to the non-scientist. When asked to explain in the report exactly what it means the scientist may object, on the ground that to do so would seem ridiculous in the eyes of fellow scientists. His objection must be over-ruled, because if the report is to give full value it must be intelligible to the reader who is not a scientist. In addition, however, it must bear close scrutiny by the technical branches who will read it; therefore mathematical and other details showing how conclusions were arrived at should be included as appendices.

The statement that reports must be easily readable does not necessarily mean that they must always be short. There may be a tendency on the part of a non-technical higher authority to discourage long reports on the ground that a concise summary is sufficient. This should be resisted, because while, say, the General Staff may be prepared to accept the conclusions without much detailed evidence, this cannot be expected of the technical branches concerned, particularly if the item is adversely reported on. If, for instance, a particular kind of boot sole is, after trial, not recommended for adoption, the providing agents will want to know in some detail how it was tried and in what respects it failed, before they will accept the adverse report. Another reason why reports should give full details is that only if they do will they be of real value to other people working on similar problems.

It will help in both the writing and reading of trial reports if a standard lay-out is adopted. Opinions regarding the best one will of course vary considerably, but the following has been found to work reasonably well:

Heading: Item under trial, followed by-

OBJECT OF TRIAL.

DESCRIPTION OF EQUIPMENT (with photographs).

METHOD OF TRIAL (one short paragraph).

EACH STAGE OF TRIAL (e.g. trial of capacity, trial of durability, etc).

Each stage of trial to be subdivided into:

METHOD (with photos etc.), Results (with photos etc.), Conclusions.

SUMMARY OF CONCLUSIONS.

RECOMMENDATIONS.

APPENDICES (detailed calculations etc.).

It is desirable whenever possible to include a definite recommendation. Apart from anything else, it gives the authorities who have to decide what action to take on the report something to "bite" on, thereby rendering their task easier than if they were merely confronted with a string of conclusions.

It assists the busy man if the first page of a report consists of an Abstract of the whole, comprising the Object, Method, Conclusion and Recommendation paragraphs. This abstract can conveniently be reproduced on the agenda of any committee meeting where the report is to be discussed.

Troop trials, whether organised by unit officers or by a special establishment, must be scientifically planned and supervised, and carried out by troops who represent the eventual users should the equipment under trial be eventually adopted. Scientific planning will minimise the danger of drawing false conclusions. At the same time the supervising staff must be constantly on the look out for some unforeseen factor emerging during the trial, and when this does happen they must be prepared to prolong the trial until it has been cleared up. The results of many trials need analysis by a mathematician before it is safe to draw conclusions from them.

Finally, full value will not be obtained from a trial if the report on it is not studied by all concerned with the attention it deserves; therefore a fitting conclusion to a troop trial is the issue of a report that is attractively set out, and intelligible to both technical and non-technical readers.

R.U.S.I.

SEVERAL members of the United Service Institution of India will shortly be leaving for Home either on leave or retirement, and, for their benefit particularly we venture to direct attention to the advantages of belonging to the Royal United Service Institution, whose headquarter address is Whitehall, London.

Founded in 1831, the Institution has a comprehensive library, a lecture theatre, a quarterly Journal, and one of the finest military museums in Great Britain. The Library contains probably the best collection of military literature in the world; books may be borrowed by members and sert to any part of the U. K. Periodical lectures are given by experts in the Lecture Hall and can be attended by members and their friends. The quarterly Journal of the Institution, which is sent post free to all members, contains reports of the lectures and of the discussions following them, as well as articles of military interest and of service developments. The museum, housed in the Old Banqueting House of the former Whitehall Palace, comprises a unique collection of military relics, trophies, models, uniforms and pictures. Plans and dioramas depicting famous battles and models of the latest warships, A. F. Vs, aircraft and weapons combine to make the museum a valuable source of reference and interest.

Membership of the Institution is open to all commissioned officers of H. M. Fighting Services, including those of the Dominions; and also to ladies whose names appear or have appeared in official lists as serving or having served as officers with any of the three Services. The ordinary annual subscription is 25s., and life membership costs £20 in one payment, or in four instalments of £5 5s., or by a Deed Covenant to pay £3 per annum for seven years.

The Liaison Officer in India of the R. U. S. I. is Lieut.-General Sir Francis S. Tuker, K.C.I.E., C.B., D.S.O., O.B.E., who has himself been a life member from the beginning of his service, and who will be happy to arrange for further details of the Institution to be forwarded to any prospective member who cares to apply either to him at Headquarters, Eastern Command, c/o 12 A.P.O. or to the subliaison officer at his own local command headquarters. Sub-liaison officers have been appointed at Eastern Command, Northern Command, and Southern Command.

DOPOGUERRA

By LIEUT.-COLONEL H. B. HUDSON

THIS is not the name of a patent medicine, a Chicago gangster or a fascinating little harbour on the Riviera. It means "after the war", and is regarded by Italians as a disease. Mingled with the cries of "povera Italia" (U. S. I. Journal, April 1946, page 247) will now be heard the philosophical exclamation "dopoguerra". Apart from the real meaning, there is a depressing air of finality about the word. There may be a certain amount of depression about this article but there is no finality. In the words of Mary Queen of Scots, "In my end is my beginning".

First of all I must express my gratitude to those who wrote to me as a result of the previous article with an Italian title. I had never had a fan mail before, and I still cherish both the letters. As might be expected, they came from people who had been in Burma. They were quite abusive about the misuse of government transport and the good time that was had by all. They had nothing like that. And the discomforts, too; that palace with the draughty rooms and grand pianos; it is terrible what war leads to. Well, I am not entering into any competition. There will be no more Italian titles after this.

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It was obvious that the spirit of the battalion would suffer after our return to India. There was going to be an anti-climax. We disembarked full of enthusiasm, eager to see our families, and with hopeful anticipation of what the future might bring. Most of the men had saved large sums, and after an interval of a fortnight or so they all went on leave after a pleasant stay at the Regimental Centre. It was now time for me to examine my credit balance and go to see if my own roof had fallen in during the past year, and in due course I was going north in the Frontier Mail. I had bought "A Short Cultural History of India" at Bombay and was feeling vulgarly contented and affable. I think my first whisky and soda cost me three rupees, but learning by experience is proverbially expensive and the undrinkable coffee was included in the bill.

My adventures began at Delhi, where I found myself in the next compartment to three I.N.A. officers who had been cashiered and released that morning. There was a large crowd to see them off and I myself was not neglected. But the real fun started at Amritsar, where the train was boarded by hundreds of people, who refused to leave it. We were therefore obliged to carry a large number of ticketless travellers on the running boards and roof. I had plenty of room in my compartment and invited some of the more dangerously placed hangers-on to come inside. At first they regarded this as a facetious remark, but later, when the wind had cooled them down, they were delighted to come.

We had a most interesting hour until we reached Lahore. Out of the sixteen who sat or clung within or without my compartment only six definitely knew why they were on the train. Four thought Mahatma Gandhi was next door, and I am glad to say that half a dozen laughed heartily and said they had wanted a lift to Lahore for weeks. My tin of cigarettes was soon finished and I

had exhausted my stock of stories about Indian troops when we stopped at Mian Mir (as I prefer to call Lahore Cantonments), where everyone disappeared. I understood that there was a big reception arranged at Lahore and sure enough the station was packed. But the birds had flown and the garlands had to be abandoned.

Once I am north of the Jhelum river I feel at home. I suppose it is early associations and my P.M. orderly and the fact that my family has been in those parts most of the war. Anyway, we crossed the bridge at Sarai Alimgarh, and I knew I would soon see someone I knew. It happened at Gujar Khan. I always push my head out of the window here, day or night, because I knew so many people who might be getting on the train. This time I was lucky. Down the platform came the well-known figure of Lal Khan,* a retired Risaldar I had known for years. We travelled together as far as Rawalpindi, where he got out after we had arranged to meet at a later date. He told me he wanted to have a quiet talk: with nobody listening, he said, looking fiercely at the other occupants of the compartment.

We were very late, and I went to sleep somewhere between Campbellpore and Attock. I woke up at Peshawar City and got out at the Cantonment station, where I was met by my old orderly. We shook hands and he told me all about the children. As the coolie took my kit out of the train I noticed that someone had written "Quit India" across my door. We left the station in a tonga driven by a man I have known for fourteen years. And so to bed.

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There now followed a brief period of the unspeakable being in pursuit of the uneatable, visits to Div. H. Q. (which had conveniently moved to Rawalpindi), two visits to Hazara and one to the Murree hills. I met Lal Khan again, and we had a long talk with no one listening, and then I had to go to Delhi. It was then that I started thinking about this disease called dopoguerra. At the time I was very angry.

"The trouble is", said Lal Khan, "that no one takes the slightest notice of us, and we have no say in the affairs of the country."

We were sitting on the verandah of his house on the outskirts of Rawal-pindi city. He is a man of substance and maintains a town and country residence. His son, a major in an Infantry regiment, had just been sent home from England. He had been taken prisoner in the desert in 1941 and had seen a good deal of Europe since then. Eventually he was released just before V.E. Day, but had been in hospital for some months before they sent him back to India. I liked this young man; he had been a sepoy and had no con eits. He was not the first person who has told me that the Indian Red Cross parcels saved the lives and morale of hundreds of Indian troops in European prison camps.

"There are over fifty thousand pensioners in this District," said Lal Khan, "and there must be many more serving soldiers. But no one ever listens to us. We are the only portion of the population which had known the benefits of military organisation and discipline. We are the only people who know the British really well.

"My son and I often talk of this and we thought it needed some publicity. So we borrowed a typewriter from the old regimental bania on the Murree road and wrote a letter to the paper. We were not reactionary, but we were quite frank. We sent the letter, but it was not published. We watched the paper carefully; there were all kinds of letters about Anglo-Indian women wearing saris and the accommodation in ships being totally inadequate, but our letter never appeared. So we sent another letter asking if it had ever been received. That, too, was unanswered."

I felt sure that the bania must have had some carbon paper, so I asked if I could see the letter. It was rather long, but no longer than many I have seen published. It set out his view, very simply, that the Indian political field was dominated by those who in fact had no contact with the people. There was a very well constructed paragraph about the urgency for independence, and a long statement showing how the army had already solved the communal problem. There were a few grammatical mistakes, but as a whole the letter would not have disgraced *The Times*. The son had certainly improved his English and his general education had been enormously increased by his enforced tour of Europe.

One of the things the letter had said was that the Indian Army had proved itself the equal of any other army, and that it had been trained by British officers who had imbued it with their spirit of impartial leadership. Indians, it said, were equally capable of training and leading the army, but we must make quite sure that the leadership is impartial.

I thought of the cemetery of the Coldstream Guards between Ferenzuola and Castel del Rio, with the proud title "Nulli Secundus" over the gate. The Indian troops I had seen during the war were certainly second to none. Most of the officers were excellent. I had often wondered if there was enough tradition yet for what these two had called impartial leadership. I still wonder.

I came to Delhi in the early spring. I knew what the men felt now when, at the end of a long war, they were told that they would be going to a non-family station after their leave. No one met me, and there was no transport to take me to my quarters. I went to my future office (it was a Sunday) and found that one of the officers in my own section had never heard of me. It seemed very impersonal, but I had come prepared.

I had been back in India two months now and had been able to look around me. Dopoguerra. Everyone seemed to be rather tired, and the end of the war had brought the end of inspiration for many. To be saluted in Delhi was rare, and the turnout of all ranks was, in my opinion, shocking. I went downstairs in the lift with a Brigadier who asked me what formation sign I was wearing. I told him it was the 10th Indian Division and asked him what his was. He was wearing the G.H.Q. insignia. As I have said before, I was very angry at the time.

Then I began to think, a process which usually comes more easily to me in my bath or when horizontal and accompanied by some soothing beverage. Did not this mighty institution plan and train the greatest volunteer army of all time? Did it not organise India as a base for the most complicated campaign of the war? Did it not overcome the most appalling difficulties of climate and lack of technical facilities? I must keep such thoughts silent or I shall be unfashionable.

Nevertheless, I confess to a realisation that, as I trudge the scented passages, I am in one of the greatest Headquarters there has ever been. I feel that a great tradition has been made, and that if she chooses to do so India will be able to guide herself to victory.

When I was very young someone gave me a copy of "The Idle Thoughts of an Idle Fellow", by Jerome K. Jerome. I have the book still, with its yellow cardboard cover. Its influence was profound and lasting. I had thought of borrowing the title for this article, but I find I am still thinking about the old Baronessa and the villages of Friuli, so I stuck to my well-thumbed Italian dictionary.

We used to have a durbar every month. Once a man got up and asked why we were fighting this war and I did my best to explain. Then he asked what he was going to get out of it. Anything controversial was barred at these meetings, but this seemed a fair question, although I saw his eyes sparkle. One of the things he'd get, I said, would be a better India. Hell! I thought, I hope he does: surely the meanest of us has learnt how futile much of this modern world is, and how much more profitable it is to be peaceful. But there was no time to give a lecture on the future.

Once the shouting died down there was a dreadful anti-climax. Many people had surrounded themselves with a vision of the delectable gardens of the future. But there is no sudden change from war to peace. If war is a continuation of policy then surely peace must be a continuation of the spirit which has led us to survive the war. There can be no return to normal, for war is a cleansing through fire. There are changes in thought and desire and a wealth of educated manhood is wasted, or shall we say sacrificed. I doubt if the world will ever recover from the first world war. Cultural progress was arrested for too long, and morality received a shattering blow. The ideas which came afterwards were spurious and altogether material. Too many people of that generation had died.

I saw my battalion when it passed through Delhi. I felt very ashamed of my pale face and white knees.

Gentlemen! I give you a toast:

"Impartial leadership".

It is the key to the future.

Airborne Artillery for Indian Army.

Five Royal Indian Artillery Regiments are to be converted into parachute regiments. They are the 9th, 12th and 17th Field Regiments, the 6th Indian Light Anti-Aircraft Regiment and an Indian anti-tank regiment.

These units will form the divisional artillery of the 2nd Indian Airborne Division. If ever these men go to war, a vast armada of heavy bombers will carry them with their guns, jeeps, ammunition and other equipment to the battle-field over which they will be dropped by parachute.

Recruits. who must be volunteers, will be drawn from almost every class in India. They will be trained by Royal Indian Air Force personnel, who themselves are now receiving instruction at the Parachute Training School, Chaklala,

THE N.-W. FRONTIER PROBLEM

BY LIEUT.-COLONEL G. L. MALLAM, C.I.E.

SINCE the annexation of the Punjab in 1849, almost a century has passed, during which time the tribes of the N.W.F. have been continuously in contact with Western civilisation. Strange as it may seem, the historian of these years will not easily discover any marked changes in tribal mentality which can be identified with recognised trends of human progress.

In the year 1945, Pathan tribal society presents a picture of anarchy and depression which stands out in marked contrast to the rapidly improving social and economic conditions in British India; politically the tribes-seem no nearer than they were 100 years ago to domestic stability, or to an established understanding with their neighbours, based on mutual confidence. Judged in the light of the generous output of blood, toil and money both British and Indian lavished on this remote borderland, the reward in terms of Pathan standards of life is disappointingly small.

The authors of the so-called "forward policy" hoped that the occupation of parts of tribal territory accompanied by the construction of roads, posts and cantonments, besides having a temporarily pacifying effect, would soften the hard core of potential Frontier lawlessness and induce the habits of peace; but these hopes have been largely defeated by the suspicion with which the Pathan regards all forms of Government penetration that carry with them any possible threat to tribal autonomy. Education and medical facilities are more popular, but have not yet been provided on a scale large enough to have any appreciable effect on tribal society.

The result is that tribal life has gone on away from the roads and cantonments, much in the same way as it did before these made their appearance, but with this difference—that while on the one hand some of the more superficial modern habits and accomplishments, such as tea drinking and motor driving and a certain new wealth have been acquired, on the other hand there has been a steady deterioration in the internal affairs of the tribes.

In recent years, as contact with Government officials has increased, the tribal system of government has been subjected to a great strain. Government objectives have not always coincided with the interests of the tribes, and Government officials with an imperfect knowledge of the tribal system have often unconsciously inflicted great harm on it, with a zeal which is praiseworthy on grounds of expediency alone. It was not perhaps fully realised that the enormously increased power over the tribes that penetration brought with it, would be used to undermine the tribal system, unless positive action was taken to prevent it.

Democratic in form, the scattered tribal constitutions are much more vulnerable than autocracies to destructive influences from outside, and unless adequately protected must slide gradually into anarchy. For some years now, the tribal system has become so far weakened that the law-abiding element is powerless to restrain the young hot heads, and may even, as is often the case in Waziristan, be subjected to terrorisation by powerfully armed gangs.

Nevertheless, it cannot be said even now that the Pathan tribes possess no social or political order of any kind. They still profess and largely practise the Islamic religion, to which they have been devotedly attached for many hundreds of years; the original distinctions between groups, sections and subsections are still clearly marked; tribal consciousness is still vigorously alive in the so-called Pathan "Code of honour", and in the universal preference for tribal customary law (so far as it can be defined and enforced) as against the legal codes and practices of India; finally, the love of "freedom" which to a Pathan means tribal autonomy and a fierce hatred of all outside interference, burns like a flame in the breast of every tribesman.

But when all this (and any more that may be justified) has been said, the fact remains that the picture which Pathan society presents to the outside world today is nearer anarchy than social progress, nearer lawlessness than ordered government, nearer political darkness and depression than enlightenment. We look in vain for established tribunals, or a well-defined and recognised procedure for the settlement of tribal disputes, and for a proper record of judicial decisions. We see on every side the despair that leads men to resort to direct action to redress wrongs, and to invest all their savings in weapons of war. We see a wastage of natural resources, a depressed economy and a diversion of youth from profitable pursuits to gangsterism. And over all, like a menacing cloud, hangs a sullen suspicion of the foreigner who seeks to introduce civilisation by the construction of roads and fortified posts, and by the oft-repeated cry of "law and order". Despair is wonderfully infectious, and if it has taken a hold on tribal mentality, it has left its mark no less on the policy of Government.

A brighter aspect of recent Government penetration is the opportunity it has afforded for a larger number of tribesmen than ever before to come into personal contact with British officers of culture and education, and with Indian officials (often of Pathan extraction) trained and educated in British India. These officials, too, have been enabled, as never before, to study tribal conditions on the spot, and to bring technical skill to bear on some of the economic problems of tribal territory.

Furthermore, a considerable proportion of the expenditure on Government. roads and other construction work has passed into the hands of tribal contractors, who have acquired a new wealth and a new experience of modern business methods. But with the completion of most of the larger works hitherto contemplated, this source of wealth and experience has dried up, and local officials have their hands too full with routine work to deal with the wider aspects of the tribal problem.

At the heart of the problems therefore lies the inescapable fact that we are faced with a breakdown of the tribal system, a fact which constitutes a serious threat to the safety of India on the threshold of a new age. But while this is no time for complacency, still less is it a time for despair. Equally with the rest of India, the North-West Frontier awaits eagerly the advent of an age in which full scope will be provided for the development of its natural resources, and for political advancement in line with the rest of India. The whole of the Indus Right Bank area, as far as the Durand Line, lends itself naturally to economic development as a single unit, but access to the undoubted resources that this area possesses is impossible without political stability, and this brings us right up against the tribal problem.

It is important also that the cultural aspect of the problem should not be overlooked. It would be a grave mistake to regard the Pathan tribes as on the

same cultural level as primitive animist tribes to be found elsewhere in India. Unlike the animist, the Pathan tribesman is separated from his Muslim co-religionists in British India by a cultural gap which is bridgeable, and can be measured in terms of education and political development. (Take for example the flourishing colony of 40,000 Pathans in Bombay, many of them from Transfrontier areas, headed by a distinguished Trans-Frontier Pathan who has risen to the dignity of a Justice of the Peace.) But so long as it remains, this gap is a danger to ordered society, because it is a breeding ground of suspicion, hate and war. For this reason, no Indian Central or Regional Government can afford to ignore the existence of an unsolved tribal problem on the North-West Frontier without endangering the safety of India itself.

In approaching the tribal problem, we must be careful to avoid generalisation on the one hand, and particularisation on the other. For instance, it is not enough merely to say that the solution is a gradual civilising process, or to go to the other extreme and say that the problem is an economic one, and all that we really have to do is to provide the tribesmen with adequate means of livelihood. Like all human problems, the one we are dealing with is complex, and is concerned with the whole range of human needs and aspirations from the government and welfare of the community as a whole to the health, happiness and livelihood of the individual. Nor must we exclude the external aspect of the problem, viz., the relations of the tribesmen with British India on the one side and Afghanistan on the other. But when all is said and done, what the tribesmen need above everything else is ordered government, as a foundation on which to build the peace and prosperity of the whole community.

Those of us who have been reared and educated in an ordered society have no difficulty in appreciating the value of sound government. We demand it, in fact, from every Ministry that is placed in power as the result of a free election; we demand it also from the permanent officials who comprise the various services in British India. On the face of it, there is no reason why the tribes who inhabit the Tribal Areas should not be brought to realise this fundamental need of all human beings living together in communities.

It may be, that if we study the Pathan tribal system carefully, we shall find that it already contains very precise provisions (somewhat out of date perhaps, and not entirely suited to modern conditions) for the government of the tribe, and that under the stresses and strains of recent years, these provisions have become corrupted or have fallen into disuse. There is indeed every reason to believe that this is so; for no tribal community in the world has been known to survive from time immemorial to the present day, without developing a just and effective form of self-government, however simple and primitive it may be, judged by modern standards.

And so, we can reasonably assume that if we approach the tribes in a spirit of goodwill on this subject of government, we shall get an encouraging response, and that our problem will resolve itself into the comparatively simple one of discovering the form of government best suited to Pathan genius, and best calculated to bring the tribes into line with conditions prevailing in British India. Our object, as we have said before, is not only to provide inside the tribal area a sound foundation for peace and social and economic progress, but also to reduce the present cultural gap between the tribes and British India, with which they are politically, racially and economically connected.

There appear to be two alternative forms of government capable of serving the above purposes: firstly, absorption in the North-West Frontier Province, and

secondly, self-government in accordance with the indigenous tribal system, modified where necessary, to suit modern conditions. I purposely exclude a third possible alternative, namely absorption in an existing Frontier State, such as Dir or Swat, because the present form of government in these States is of the dictatorial variety, which is not only foreign to Pathan tradition, but also at variance with the constitutional democratic trend in British India.

Of the two alternatives before us, no one with experience of Pathans would for a moment doubt the form of government that they would choose; no one else perhaps would seriously expect them to choose any other form but that with which by long tradition they are familiar. We do not think that any reasonable person would contemplate imposing on the tribes against their will a foreign system of government which would destroy all remnants of their tribal identity. Such a suggestion would be contrary to all previous declarations of policy by the Government of India, none of which has ever mentioned conquest as an ultimate objective.

We have arrived at the conclusion therefore that the first step in the solution of the tribal problem must be a reconstruction of the tribal system, modified where necessary to suit modern conditions. But out of this conclusion a number of questions arise, to which some answer will have to be given, before the Government of India can be expected to sponsor the proposal, and to give practical effect to it through the agency of Frontier officials.

First, how is the true tribal system of government to be unravelled from the tangle of abuse and corruption which now surrounds it? Secondly, assuming that it is possible to identify and reduce to writing the indigenous tribal system, will it satisfy modern standards of equity and good conscience sufficiently to justify its public and official support by the Government of India? Thirdly, would there be one Tribal State or a number of such states, and how would their relations with the Government of India, the Afghan Government, and the Government of the N.-W.F.P. be regulated?

Questions such as these (there are many others) cannot be answered satisfactorily without a good deal of research, and all that can be attempted here is a brief appreciation of the extent and value of the information now available on the subject of the Pathan tribal system. Unfortunately, little attention has been given to this aspect of the Frontier problem by past British administrators, and no authoritative treatise on the political constitution of the various tribes is in existence. All Political Officers with Frontier experience, however, possess some knowledge of the subject, and more still can be obtained from Pathans on both sides of the administrative border.

There is also a considerable volume of material available in the record rooms of Frontier Districts and Agencies, which contain the files of numerous judicial cases decided by reference to tribal jirgas, or Councils of Elders. When I was Political Agent at Malakand from 1939—1941, I unravelled by means of these records a part of the original tribal judicial system of the Yusafzai. A judicious selection of the older and more reliable cases, containing unanimous findings by constitutional jirgas, and their classification under the various heads of crime and civil dispute, enabled me to distinguish fairly clearly between those in which the procedure observed was in accordance with the true customary law, and those in which it was not. I then tested my conclusions out on a whole series of new cases, and in close consultation with the jirgas evolved a body of up-to-date tribal case law, which has now become the foundation of a regular legal system.

This system the jirgas can and do operate on their own, with only nominal assistance from Government officials (jirga findings are still approved by the Political Agent, and appeals still lie to a Commissioner F.C.R.) This has revolutionised the whole outlook of the tribe. Having been for many years dependent on Government officials for the settlement of all disputes, the tribe has now recovered much of its old self-reliance, and is even ready for a further constitutional advance. Preliminary discussions have already taken place with the tribal jirgas with a view to the setting up of a single representative jirga of the Yusafzai (to sit at first under the presidency of the Political Agent) to take over the administration of all departmental activities (such as Education, Medical, Agriculture, etc.) in their areas with the necessary financial powers, much on the lines of a District Board in British India.

An interesting point about this experiment is that the tribes concerned inhabit an "administered" tribal area, where they have been subjected to a large measure of direct control by Government officials. Their tribal system had therefore suffered considerably more damage than those of other more independent tribes, who have not been under direct Government control. My experience of the rapid recovery of the Yusafzai encourages me to believe that the recovery of other tribes will at least be equally rapid.

I do not wish to minimise the difficulties ahead, but however formidable they may be, the Malakand experiment has at least shown, firstly, that approached in a spirit of goodwill the tribes can respond enthusiastically to a lead in the direction of ordered self-government; secondly, that it is possible for some one without expert knowledge to uncover and bring to life again a part of the indigenous tribal system, and, thirdly, that the legal system revealed in the case of the Yusafzai still has the sanction of the tribe, conveys a high standard of justice, and is closely allied to the Muslim law of Shariat. The local Qazis, while maintaining the Shariat Law for all tribesmen willing to accept it, never offered any opposition, open or secret, to the regularisation of the tribal customary law, and assured me personally of their satisfaction at the results achieved.

But let us not be satisfied with anything less than an expert scientific investigation into all aspects of this important matter. There are, after all, other Islamic tribes now in existence, besides the Pathans. In Arabia, Kurdistan, Syria and Morocco, Islamic tribal systems are functioning more or less in a state of independence. Access to these tribes is comparatively easy, and there is probably already a mass of material available on their political constitutions. I suggest therefore that the Pathan tribal systems on the North-West Frontier of India should be studied without delay by a Commission of experts, including an eminent British scientist with experience of tribal (particularly Islamic tribal) constitutions in other parts of the world, and also with experience of the working of what is known as the Lugard policy of "indirect rule", as applied by the Colonial Office to some African tribes. I am not of course recommending any application of African tribal customs to Pathans of the North-West Frontier. The only possible connection between these completely diverse sets of tribal systems is one of principle and policy.

There is an obvious value in testing by scientific observation of tribal systems all over the world the moral standards inherent in the Pathan tribal system, and the extent to which reliance can be placed on it to promote the moral and material advancement of our tribal communities. Englishmen possessing this knowledge to an eminent degree are to be had for the asking in England, and

one could be deputed to the Government of India for a fixed period of duty. Among Frontier officials, both British and Indian, there is no lack of suitable men, experienced in the practical handling of Pathan tribesmen. With a Commission composed of such men, much valuable research work could be done, which would provide the Government of India with all the information they require to formulate a definite policy.

If the final objective may be defined as the willing acceptance by the tribes east of the Durand Line of a permanent and honourable place in the social, political and economic life of India, this will only be achieved by positive action. The old principle of non-interference in tribal domestic affairs is no longer in keeping with modern times, if it leaves the Pathan tribes isolated in a "No Man's Land", doomed to permanent outlawry for no other offence than that they cling tenaciously to their ancient tribal traditions. The more recent idea that external pressure on the tribal system, if applied strongly and consistently enough, and if combined with some vague "civilising" processes, would eventually wear down the tribal spirit and reduce the Pathan to the level of an ordinary Indian villager, must now be abandoned, if only because it would take too long.

India, like the rest of the world, is rapidly becoming "planning-minded", and the conception of democratic government is fast changing from the static to the dynamic. The economic development of the whole Indus Right Bank area as far as the Durand Line cannot be held up much longer, and no Government of the North-West Frontier Province can develop its own resources to the full until the Tribal Areas are merged for planning and development purposes within the Province as a single economic unit.

The approach to the tribal problem here advocated would call for a combined British Indian administrative effort of a high order; but with it would go a strong moral and intellectual appeal, which would not be without effect on the officials entrusted with the responsibility of promoting the development of tribal mentality towards a clearly defined objective. From private conversations I have had with Congress and Muslim League Ministers of the N.-W.F.P., I believe that such an effort would be equally welcome to both of the major political parties in India. The sympathetic interest of the Afghan Government is eminently desirable, as it would remove a possible complication—my own experience in Afghanistan leads me to believe that it would be readily given.

From the Englishman's point of view, what could be more fitting than that the British connection with this historic frontier should reach its fulfilment in the accomplishment of a task that would command the respect of the world, give added security to India, and cement for ever the old and very genuine friendship between the Englishman and the Pathan.

MARINE INSURANCE*

BY COMMANDER E. C. STREATFEILD JAMES, O.B.E., R.I.N.

"Now these are the laws of the Navy Unwritten and varied they be And he who is wise will observe them Going down in his ship to the sea."

THE old adage "A stitch in time saves nine" is very appropriate to the whole aspect of morale, whether during peace or war. When our bodies are diseased we invariably rely upon the medical profession to restore us to health and strength, but how frequently does the doctor say: "If only you had taken prophylactic action all this might have been avoided?"

Morale, until a few years ago, was viewed as a new word to describe "esprit de corps" or "pride of ship," but the recent war has taught us that, rather than being the re-incarnated spirit of our forebears, it is the very essence of manpower economy. Not until we realised that every able-bodied man had to be used did we begin to appreciate where lay the main causes for lack of efficiency and the resultant wastage. Given a reasonably intelligent healthy body, it became apparent that if efficiency could not be produced without undue wastage, there might be something radically wrong with the system. Each body is a human entity possessing a mind and a will of its own; and it is the process of developing the mind in the correct direction which constitutes the basis of morale.

There have been and still are a great many anomalies in service conditions amongst the three fighting Services, and much remains to be done to smooth them away. Basically, a sailor, soldier or airman should have much the same to look forward to, though the paths to their respective goals must of necessity lie along varying terrain even as the elements in which they serve are widely different.

The successful prosecution of the sea profession demands a sound knowledge of men, and a high degree of sympathy with men in their various trials and difficulties, which are perhaps more evident at sea than in the other Services. This perquisite, which ranks high amongst officer-like qualities, requires to be highly developed in a country such as India, with the diverse conditions of life amongst its many peoples.

If a ship is to be thoroughly efficient the morale of her ship's company must be high, else she will be unable to acquit herself well in times of stress and emergency. Morale must, therefore, constantly be foremost in the minds of all Commanding Officers, and even more so of Staff Officers at Headquarters. The Higher Direction cannot afford to divorce itself from the life of the Service, for administration of personnel and material demands a particularly high knowledge of the men themselves and the uses to which their equipment are to be put. No staff officer, to be of any real value, can afford to cut himself off from the men of the Service for long periods, without detrimental effects to that Service. Fundamentally, the problem is one of developing and maintaining the men's confidence, both professionally and personally, in their own Service. The men must be happy and satisfied in their work, having confidence that it

^{*} Owing to particularly heavy pressure on space this interesting and constructive article has had to be held over for the past three issues of the "Journal," and in view of events which occurred meanwhile it is but fair to the author to explain that it was penned some time ago—Ed., U. S. I. Journal.

has a purpose behind it which, though not always apparent to themselves, is surely evident in the minds of the Higher Direction.

Many factors tend to disturb morale. Chief among them is when men have grounds for assuming inefficiency amongst the officers with whom they more frequently come in contact. Boredom, so common to the sea-faring man on patrol or long passages and when swinging to an anchor, coupled with physical discomfort in small ships in hot climates, may well contribute to the wearing down of morale; envy of others whose lot may appear to be brighter than theirs; and, finally, defeatism will also undermine the morale of any ship or establishment. In turning from war to peace, conditions vary a great deal. Much of the thrill and excitement of a naval service may tend to disappear with the advent of peacetime routine, but for a high standard of efficiency to be maintained, morale must be kept constant, and no pains can be spared to achieve this end.

We are passing through a transitional stage when many men are likely to return to civil employment, and even greater numbers may find themselves out of work, owing to inevitable reductions which follow in the wake of war. The presence of such temporary service men amongst those who have elected and are selected to retain the navy as their careers, may well have a disturbing influence. It is, therefore, doubly necessary that those who remain should be contented. This contentment cannot be achieved unless terms and conditions of service with future prospects of advancement and promotion are faithfully reproduced before the minds of the men, so that they can satisfy themselves of their choice. In this the Higher Direction must shoulder the responsibility of feeding Commanding Officers with adequate reliable information, so that they may faithfully transmit it to the men under their command.

Evasive answers and pious hopes during this interim period between war and peace, will breed a sense of insecurity between officers and men. It is, therefore, essential that only such information as has the authority of the Higher Direction should be distributed for consumption by the lower deck, and in this a note of warning is struck to all officers, whatever their rank.

We have passed through a period where recruitment has been out of allproportion to the size of the regular Royal Indian Navy, and consequently, though all recruits have been volunteers, those undergoing wartime training have not received the gentler introductions to naval life that their regular brothers entering as boys enjoyed. They have been required to develop into qualified seamen almost before they set foot aboard ship. The same applies to officers. With experience these men have developed, some more rapidly than others, into sailors in every sense of the word, and during the initial stages there has been a sense of potential instability.

Training has perforce had to be carried out on shore, so that much of our war time navy has subsequently had to face the discomfort of sea life with a jerk. Sea-sickness is not the least of these jerks, and though frequently regarded in an amusing vein, is far from a joke when actually suffered under service conditions. With the black-out, and ships battened down at night, conditions below decks have frequently been extremely unpleasant, and it speaks worlds for both officers and men of the "Wartime Navy" that the high degree of efficiency achieved was reached within such a short space of time.

Leave, which is a subject very much in the forefront of every sailor's mind, has had to take the rearmost place, consequent upon the exigencies of the Service. Recreation, too, so far as team games on shore are concerned, has often

had to be abandoned for long stretches at a time. With lack of leave facilities, its domestic worries have increased, and in the minds of some have become unduly magnified. Infrequent arrival of mails, too, contributed not a little to the disturbing of moral equilibrium. Long periods of separation, and deprivation of the normal amenities of life, have required much self-control, and here it is that the good divisional officer has played so important a part, with his practical sympathy and knowledge of conditions. Welfare, too, has taken its share, but this latter organisation is yet in its infancy, and requires to be considerably developed during peace if it is to be of the value which it should be during war.

There is untold scope for Inter Service Welfare and Civil Liaison in the countryside amongst families of serving men, in affording advice and assistance in the diverse variety of domestic problems which arise. The development of these organisations should materially assist in reducing the numbers of cases of overstayal of leave, with their consequential penalties which all tend to reduce morale.

Health has been an important factor. It is essential that it be maintained at the highest pitch in order that the rigours of the weather and discomforts of hermetically-closed ships may be met with a smile and a joke. Ill-health is frequently the cause of a tendency towards fear. It is natural to every man to be apprehensive of the unknown, but it is the degree to which he can control this apprehension which counts in the time of stress. Once actual fear becomes apparent, direct action must be taken to remove the individual, lest the infection spreads.

The absence of the sailor from his family re-acts upon his nearest and dearest, probably more acutely than upon himself, with the consequence that they write letters to him fearing for his welfare. Such letters frequently prove a disturbing influence amongst members of a ship's company, and the welfare organisation should be directed towards educating families of serving men in the type of letter to write to their men folk. In that way much assistance to the maintenance of morale can be given by the men's families.

On board ship much can be done to assist in maintaining morale by providing small amenities, such as radios, gramophones, books and games, and wherever possible by organising concert parties and picnics. Good food, however, is one certain tonic, and close attention to cooking and menus for all on board should be the constant care of Commanding Officers of all ships.

It is never possible to provide man with all his requirements in the compact space available in a ship of war, but the best use of that space can always be made. Complaints must be expected, but so long as these are healthy and constructive, no danger to morale may be expected. In fact a healthy complaint or suggestion is the sign of a potentially happy man, for it shows that he is using his spare time to improve his surroundings and better the conditions of his mess mates.

Newcomers to ships are frequently ignorant of the Service channels through which complaints and suggestions should be made, and divisional officers must ensure that men do not become disgruntled through any feeling of inferiority complex, or fear of being unheeded should they voice their feelings. All officers and subordinates must realise their duties in this respect and help to put the newcomer in the way of doing the right thing, at the right time, in the right place.

Many types make up a ship's company. Amongst them may be found the studious and intellectual ratings who are not entirely satisfied with a sing-song or a game of karim in the dog watches, but prefer their text books. Such ratings should be given every assistance and encouragement. It is a natural and healthy form of ambitious enterprise from which the Service stands to benefit in the long run. Whilst there will always be "hewers of wood and drawers of water", the potential talent amongst ratings for higher advancement and promotion has to be nurtured. It is from this source alone that sound development on and promotion from the lower deck can be ensured.

India is not naturally sea-minded and, therefore, both officers and men must develop a sea spirit which they can impart to their children, so that the sound of the sea may reach the homes of the masses. Whilst the Navy is an integral part of the harmonious whole of the Defence Services it does claim a peculiar and special desire to be inculcated amongst its personnel, which can only be engendered by connections with the sea and ships.

Another healthy influence upon morale is the timely recognition of outstanding service. Many ratings have but few opportunities of coming into the public eye, and it is, therefore, the duty of every commanding officer to recognise outstanding ability, and make it his personal business to see that such service is adequately recognised by higher authority. Only by such action will the men realise that they are not merely cogs of some great machine, operated by unresponsive Olympians from their etherial seat and removed many hundreds of miles from the sound and sight of the sea and those that sail upon it.

The personal touch at all times is indispensable, and tolerance, sympathy and patience, combined with firmness, humour and dignity, should invariably be the guiding principles in Service life, for nothing can be gained by arrogance which may not be won by grace.

Russian Scientific Research

Scientists in Russia are experiencing an all-round improvement in their economic status. Front-ranking scientists are receiving record salaries in the Soviet Union to-day, some getting as much as 20,000 or 30,000 roubles monthly, or about £400 to £600. Moreover, they get special rations, country houses, cars, and so on.

In the same way Russia's enormous army of teachers, who had a very thin time during the war, are now receiving decent houses, bigger salaries and other facilities. All this is an encouragement to themselves and to others, and it represents the principle of the gradual extension of good living to more and more people.

Fundamentally, the Russians are thinking in terms of a peaceful future, but of an extremely strong Russia holding her own. The attention given to the problem of atomic energy is very interesting. Hundreds of popular lectures on atomic energy are going to be given in the coming months, some in Moscow parks. The underlying theme of these lectures, as a recent three-column article in Pravda pointed out, is that Russia is very interested in the peaceful possibilities of atomic energy.—Alexander Werth, Moscow correspondent of the B.B.C.

RAISING A REGIMENT

By "Toor"

MANY new units have been raised since 1939, and there must be in India quite a wealth of experience of difficulties and snags which such undertakings involve. There are also probably many weighty reports on these difficulties, and how best to overcome them.

But perhaps a less ponderous account of the experiences of one officer who embarked on the undertaking may be of some interest and even some value. Anyhow, for what it is worth, here is the story of the raising of a regiment.

In the hot weather of 1939 I was the Administrative Commandant of an Indian Territorial Unit. I also ran the local U.T.C., and was the Vice-President of one or two District Soldiers' Boards. But in spite of these various appointments my day was not a busy one, and for the first time in my life I reached a standard which made it profitable to play snooker for money (the club was next door to the office).

Even in the very old world cantonment which was my H.Q., ancestral voices got no special credit for prophesying war. We re-wrote standing orders, we reviewed our stores, and intensified our recruiting efforts. We did all we could think of in readiness for rapid embodiment. In view of the international tension, a very junior and very charming young officer was sent to me as Adjutant. He professed absolute ignorance of, and little interest in, any regimental administration—but he was no mean snooker player and as things stood no more was needed. When the time came for work I could not ask for a more loyal assistant.

On September 3 we were informed that we were at war with Germany but no orders came for embodiment, and although other I.T.F. units were called up, we were unaffected. Week after week we awaited our mobilization or embodiment orders, but none came, and we began to realise that we were the "poor relation" of the I.T.F. Our military value was evidently not rated very high. This perhaps was not surprising. The unit consisted of two companies of Infantry which were seldom up to strength. We were in a part of India notorious more for the violence of its politics than the prowess of its fighting men, and anyhow it was a "phoney war."

In October we were thrilled to hear that we were to be visited by a distinguished personage from the General Staff. The Adjutant (George we will call him) rose to the occasion. He had the office dusted and stuck up maps and charts showing recruiting figures. He had never contacted a senior General Staff Officer, and was out to be impressed. Half an hour before the great man arrived, as we were sitting at our office tables, he noticed a serious defect. The engagement block on my desk was out of date and innocent of any kind of engagement note; the few engagements of our first few months of the war could be remembered without such aids. He quickly removed the out of date sheet and filled the current ones with blue pencilled notes of engagements which were imposing in their number but, I fear, mostly fictitious.

We were ready, and very soon the great man arrived. He shook George considerably by knowing both our names in advance, the strength of the unit and its composition. He wanted to know whether we could raise the unit to a full battalion, and if so, how long it would be before we would be ready to take on an internal security role. I had, of course, often considered the question, but in view of the difficulty of keeping two Companies up to strength and remembering the very unfavourable opinions of some of my predecessors about the unit, I had never been too confident of being able to raise a whole battalion.

However, when an official opinion was suddenly called for I reflected that the recruiting area had a population of only slightly less than that of the British Isles, and surely from among them a thousand good men could be found! In a a moment of optimism I said I could raise a battalion. The question of how long it would take required some calculation. The unit was still "disembodied," and my permanent staff consisted of George, a clerk, a regular Q.M.H., and, of course, Abbas, the peon, who was also the bugler when the unit was embodied for annual training.

Those already enrolled would have to be called up, I myself would have to go out into the districts and enroll 500 men and I would have to find and train at least six new senior grade officers (2nd-Lieutenants) from among the educated youth of the province. Again in a moment of optimism I said we should be ready to carry out our role in six months, but how I ever supposed that it could be done in the time I still cannot imagine. However, it was.

When the great man had gone, George and I looked at one another, and for the first time I felt that the war was catching up with us. For the first time in his life George looked solemn. Our immediate problems were three. First, to call up the men already enlisted, next to enrol 500 recruits, and thirdly, to induce the Training Battalion to which we were affiliated to provide a training staff.

The first was easy and merely required signatures and dates on forms already prepared. Their reception and the preparation of the camp was a matter of routine, but everything in the way of tents, cook-houses, etc., had to be doubled at very short notice. Indents for masses of stores and equipment must be made out at once. When in doubt in such matters we knew how to start. We called for the clerk, the head clerk but, alas, the only clerk. He was a magnificent person with 40 years service, and knew the answer to most things. He knew the answer to this one. It was plain hard work.

From that day on for the next 18 months the old man typed in a cloud of cigarette smoke from 7 a.m. until 11 p.m. He never seemed to stop. Throughout that time he was almost single-handed. He knew every regulation and every new order; he forgot nothing. How exactly you raise a new battalion without such a person I don't know, and there cannot be many of them. So much for Problem No. One.

Problem Two, recruiting 500 men, was more difficult. The normal recruiting organization was not available to us. Recruiting officers seldom, if ever, visited the area. It was necessary to write to likely people all over the two provinces, and ask them to have volunteers ready for inspection at stated times and places. Many of these places could only be reached by journeys by train, boat, and that worst of bad vehicles, the *ekka*. We sent out parties of our older "members," as I.T.F. soldiers were referred to. We provided them with notched sticks and knotted tapes, so that they could roughly gauge height and chest measurement, but in spite of these aids their ideas about suitable recruits seldom conformed with mine.

As I have already said, most of the districts were not regular recruiting areas. In many there was no tradition of army service. Its absence led to all sorts of complications. Sometimes a huge crowd awaited me outside some Circuit House or Inspection Bungalow, all fighting each other to get a place in the queue for preliminary inspection. After making a selection and turning away a much larger party of deeply disappointed rejections one went to have a meal, to find, on returning an hour later, all the selected recruits had changed their minds and firmly refused to join. Their various relations had caught up with them and forbidden them to leave.

To give them time to settle their affairs before leaving I tried the system of giving each selected recruit a signed pass, and said I would collect them in a week. This was a complete failure; the passes had been sold as many as three times by the end of the week, and the Ganga Ram who presented himself at the next meeting was usually a very poor substitute for the broad-chested Ganga Ram whom I had selected the week before. Having paid a large sum for this pass he also felt deeply wronged when he was not accepted.

On another occasion a large party of would-be recruits were being rejected with monotonous regularity by the M. O. for hydrocele. They were deeply chagrined that, what was to them such a trifling and locally almost universal complaint, should disqualify them for the army. Suddenly the word went round that I could override the M. O's decision. Apparently my predecessor when visiting the same place some years previously, had asked the M. O. not to reject minor cases of hydrocele.

Whatever the cause may have been I suddenly found myself surrounded by a shouting crowd exhibiting the affected parts for my inspection. "Zarur bara hain, magar itna bara nahin hain" they all explained. The standard on which I could base my estimate of normality being strictly limited and personal, I felt at a loss, but the doctor was adamant, and in spite of (or because of) their riches they went away sorrowing.

So much for recruiting. It was a strenuous month, but we got recruits.

The question of new officers promised to settle itself. Word went round that officers were required, and I was overwhelmed with applications. The office was constantly visited by venerable gentlemen asking that their son's or nephew's application should be favourably considered. Large numbers of young men called in person, and others again wrote and sent telegrams.

I considered placing the matter in the hands of a Selection Board with a member of the Advisory Committee on it, but no board can really estimate the relative merits of a succession of young men who appear before them for five-minute conversation. It is not, in fact, a question of merit, but rather an attitude to life which needs to be estimated in candidates for commissions.

One fact was outstanding. Everyone, both candidates and their venerable sponsors, were all firmly convinced that officers merely had to dress well, behave becomingly, and learn some words of command in drill. Nothing which I could say would convince them that officers had to work hard. Remember, it was still 1939. Everything that they had heard, read and seen of the life of officers in the nearby cantonment confirmed their opinion that an officer's job was almost a sinecure.

I therefore hit on a plan which very largely solved the selection problem, and at the same time corrected this wrong estimate of what is required of an officer in wartime. Any young man who was reasonably well educated and

medically fit was accepted at once. I formed a cadet platoon; the applicants had to join the I.T.F. as sepoys, they had separate tents, and were allowed to supplement their messing up to Re. 1 a day. They had to undergo a fairly strenuous recruit's course with the rest of the recruits, but were given extra instruction in office routine when the recruits were resting.

Many of the applicants, when they heard the terms and saw the tents where they had to live (four or more in a 160 pounder), decided that a military life had no appeal for them. Others joined, but after a week or more of recruits drill gave up the unequal struggle and asked for their discharge. At the end of three months there were a dozen or more very fit and smart young men from whom to select, all of whom I knew fairly well and had watched for three months. Whether we selected the best I cannot, of course, be sure, but they have all done well, some brilliantly.

The third problem, that of getting a training staff out of the Training Battalion, was not easy to solve. I was too busy to go there personally and plead my cause. Expansion had begun and instructors were at a premium. In the nature of things we got what was left. However, as compensation I was sent two senior S.U.L. officers who had recently rejoined. Both were experienced regimental officers of a regiment confining itself to one well-known fighting class. Although I suspect that in their hearts they did not share my enthusiasm for this experiment in widening the basis of recruiting areas for the Indian Army, they were nonetheless invaluable.

An experiment it most certainly was. The recruits were of two distinct types. One type were plainsmen, men whose ancestors had served in the army, Rajputs, Brahmans and Mussalmans whose districts have been left behind in the general move of recruiting areas north-westwards. The other type was the aboriginal from the forest-covered hill country. These had never served in the army. They themselves would never have suggested such a thing. Even the local civil servants and police officers were almost unanimous in saying that these men would never make soldiers. They said they would not be susceptible to discipline for more than a month or two on end, they were not sufficiently intelligent, and none of them would ever make an N.C.O., far less a V.C.O. They also argued that as two or three constables could usually disperse a crowd of several hundreds of them, their fighting value could not be very high.

My own experience of them was confined to my observations out shooting when they served as beaters. When walking up a wounded tiger they seemed much less alarmed than I was, in spite of having only bows and arrows while I had a double-barrelled rifle. To me men who went out after tiger with bows and arrows were not devoid of courage, and they were certainly cheerful, truthful and tough.

They were not quite without admirers, and several missionaries (and one European official) who had all spent their lives among them, believed in their potential merits as soldiers. There seemed to be some similarity between these jungle folk and Chins and Kachins of the Burma Rifles who make splendid soldiers.

Another prophecy by the sceptics was that the Brahmans, Rajputs and Mohammedans could never live in good comradeship with aboriginals, whom they regarded as savages and menials. This very real difficulty and many others were overcome largely due to the good offices of a Rajput pensioned V.C.O. who was persuaded to rejoin for the war. He had joined the army 28 years before, but was still vigorous and a tremendous personality. Among other things, this

V.C.O. (who became Subedar-Major) completely solved all difficulties connected with the very rigid caste rules of the local Brahmans and Rajputs about food and cooking.

The ritual necessary to prepare food and to prepare the eater to eat it was so elaborate that it took some three hours to have a hot meal. Any slight variation from their village diet and method of cooking was condemned as contrary to their caste rules. The Subedar-Major somehow persuaded them that such rigid ideas were old-fashioned, and today there is simply no problem. Rajputs and Brahmans, Aboriginals and Mohammedans have lived happily in small detachments together for weeks on end, and each learned much from the other about food to their great mutual advantage.

Organizing 800 civilians into a self-contained smooth-running unit brings out very starkly how much of minor administration is taken for granted in an old-established regiment. How exactly does the C. Q. M. Havildar divide out the rations to the cook-house? How exactly does the Battalion Orderly Havildar spend his day? All these things had to be legislated for in great detail. It made us realize the tremendous value of continuity and tradition.

We were dealing with 800 civilians, mostly illiterate, in uniform and with the illiterate man's suspicion that he is being done down. Many recruits after handling a large number of sacks of rice and tins of ghee on ration fatigue were convinced that they were not getting their full "whack" of food at the cookhouse. We carefully weighed out a man's ration for a day, cooked it and tastefully arranged it on two plates representing the morning and evening meals. Two such plates were exhibited at each cook-house, and everyone who reckoned he had got less than the specimen meals was invited to come and say so.

Again, illiterate people rely much more on rumours than the official word, so it was necessary to explain everything and broadcast as much information of day-to-day happenings as possible, so as to forestal the rumour-mongers. We found that if they understood the reason for the many rules and orders they were much more ready to obey them cheerfully. The old Indian Army custom of "open durbar" was a great help.

Another turning point in the general build-up of the battalion was the arrival of new British officers from England. It was essential to inspire them with an enthusiasm for making the battalion a success. They had to be made to realize that they were something of pioneers, and were part of a team which had the important and thrilling job of widening the basis of recruiting by training new classes of hitherto untried men.

We were particularly lucky. There was no lack of enthusiasm in those that came to us, although there was a very definite preconceived prejudice against senior officers of the Indian Army. They were not to blame for this. The Press and stage has, of course, for years made Indian Army Colonels the butt of their jests, but in recent years a number of more serious writers had condemned all senior officers so consistently and bitterly that they (senior officers) could hardly expect anything more than formal politeness and concealed contempt from young men from England.

It was amusing to notice how they reacted, and after formally paying respects to those they took to be irascible figureheads, they looked round for some younger officers to tell them what was doing. It was amusing, too, to notice how it slowly dawned on them that, in spite of their preconceived ideas, some senior officers were still human, and quite active in spite of their grey hair, and sometimes even capable of independent thought quite unconnected with

either parade grounds or "Poonah". Each instance of comparatively human behaviour or conversation by a senior officer was a fresh surprise, but the arrivals were generous enough tacitly to admit that their preconceived notion needed some adjustment, and meanwhile they mostly identified themselves with the battalion and became enthusiastic members of it. Those who were unable to do so were soon found employment in other spheres.

Even more important than the absorbi g of these British officers was the arrival earlier of a pre-war I.C.O. in place of George. He was a tall imposing person from a very famous upcountry regiment. All the young Indian officers at once looked to him for guidance. It would have been very understandable if in his chagrin at being posted to a new and unheard-of unit of nominally non-martial men, some expressions of contempt had escaped him. Such expressions, however understandable, would have been fatal. The men would have lost confidence in themselves, and the new officers would have lost sympathy with the men.

However, those expressions of contempt were never uttered. He was too big a man with too wide an outlook to allow race prejudices and personal feelings to wreck our efforts, anyhow until he was persuaded by personnel experience that the experiment was a failure. It was unquestionably to this officer's broadmindedness and co-operation in many difficult times that the

experiment turned out a success.

To watch the steady transition of a rather comical motley into an organized unit is, perhaps, the most gratifying of all experiences for those responsible for the process. There were, of course, bad patches, periods when everyone seemed to lose enthusiasm, epidemics of mass nostalgia, with consequent absenteeism and applications for discharge. On one occasion some ten aboriginals were brought up for being absent for 36 hours. They admitted the absence, and admitted that they knew that it was against orders, but gave as a reason (to them perfectly adequate) that they had not been drunk for a month, there was no drink in camp, and everyone must get drunk sometimes; so they had gone back to their village to get drunk.

At one time it seemed impossible to get the men fit. Good food made them swell up with unhealthy looking fat, but training could not turn it into muscle. It seemed impossible to get them into hard condition. The answer was that over 90% had hook worm, and mass treatment carefully carried out and repeated soon overcame the difficulty. Mentally and physically they became

more energetic and alert.

At the large industrial town where we were employed on our first Internal Security role, subversive propaganda and political agitation became a serious menace. The area was full of it. It was manifest that the strictest bounds and the sternest security measures would have been useless. Our men were split up in small guards all over the works. We therefore decided that we must treat subversive influence like a contagious disease, and as we could not isolate ourselves from it we must be inoculated and become immune.

We started our own propaganda. We tried to find out or guess all the insidious arguments which the agitators were using or-were likely to use, nd we gave the answers to them in advance. We preached no political creed, of course, nor did we content ourselves with airy commonplaces about loyalty to King and country. We did point out that in any country and every country a political-minded army was a menace and led to disaster. We explained how this Government or any future government in India would always suspect and therefore disband a unit which had ever shown a political bias in any direction,

How the battalion survived the very difficult times of 1942, when our recruiting areas were the centre of the storm of political violence and open insurrection; how it was converted into a regular battalion when every man had to be given the choice of signing new terms for general service or alternatively taking his discharge (and discharge is a temptation to young soldiers with about a year or two of service when the newness has worn off), how in an emergency the men rose to the occasion when called upon at very short notice to leave their L of C job, and without preliminary training to march up into the hills and face advancing Japs; how they gained a feel ng of ascendancy over the Japs and in fifteen months of hard living and hard marching, paid a dividend in dead Japs and gained a reputation as a fighting unit which any well-known regiment would be proud of; all this is no part of this account, except for the fact that it all happened.

The battalion was a success, a great success, as a fighting unit. Other battalions have been raised, and out of these beginnings a new regiment has

been added to the Indian Army.

It might so easily have failed. Physically the average man was not, in appearance, up to the standard of the better known fighting classes of Northern India. They had no tradition of service in the army. Many of them would freely admit before joining the army that they were neither as brave nor as strong as the men of the Punjab, and their appearance supported the admission.

The main reason for success was, I believe, the great emphasis we put on creating a proper spirit, esprit de corps. Stern discipline and heavy punishment is clearly valueless until the men believe in their hearts that the offences for which they are punished are in fact offences and against the common good. To be slack on guard is to them no real offence until there is a general desire on the part of the majority to have smart guards. A general desire for smartness must therefore be created before punishment for slackness. An understanding of the need for physical fitness and a general desire for it must be created before rigorous training starts. The same, of course, applies to all other forms of training.

How often in such matters is the cart put before the horse, and bewildered men find themselves undergoing 28 days R.I. before they ever understood the real nature of the offence, or they find themselves in a regime of back-breaking toil without knowing that the hardening process they are undergoing is only a

way of avoiding casualties in face of the enemy.

Another tremendous factor in getting good results was the doctor, the R.M.O. Our doctor was from Madras, and no unit could wish for a better M.O., but few are blessed with such a good one. Orders about hygiene, like all other orders, are only really effective if the great majority realize and believe in their efficacy. It was not necessary to force Mepacrine down the men's throats. They believed in it, they came for it, they took care that they did not run out of stock. The same was true of the many other medical edicts. A doctor who spared himself no efforts for the comfort of the sick, who was always at their disposal, and above all who was successful in his treatment of disease, was worth listening to, and they listened and obeyed.

But all these things can be said more briefly. We had a slogan, a guiding principle of conduct. It was this: "Every man must feel that every order, however harsh, however exacting, was a necessary well-thought out order. Every officer must feel that every order which he gave would be promptly and cheerfully obeyed". Among officers there must be no cliques and no quarrels. To

be still more brief, we went all out for, and we got, "a happy regiment".

THINGS PEOPLE SAY AND WRITE

"Insipid food makes morose people."—Mr. Frederick Keeble.

"Liverpool is to be the first British port to become all-radar."—Sir Robert Watson-Watt.

"Nelson kept the Grand Fleet in health by exercise and onions".—Mr. Frederick Keeble.

"Big Ben is probably the biggest propaganda instrument in the world.—" Mr. T. W. Berriff.

"Except for the Nobel Prize, a Swedish tribute, I am entirely undecorated." —Mr. Bernard Shaw.

"More than six million Poles were killed during the war."—M. Rzymowski, Polisj, Foreign Minister.

"Pedigree is almost as important in aircraft as it is in horses or dogs."—
Mr. Ivor Thomas, M.P.

"It is enough to make a Civil Servant turn in his groove."—"Peterborough", in "The Daily Telegraph."

"The standard R.A.F. Meteor gets up to 30,000 ft. in exactly five minutes."
—Charles Gardiner, B.B.C.

"Britain has come out of the war with a national debt of over £23,000,000,000".—Norman Crump.

"We are flying about 700,000 miles a week on 90 regular services on 30 routes".—Viscount Knollys, B.O.A.C.

"Non-talking railway carriages are more needed than non-smoking ones." Miss E. R. Spalding, in "The Times."

"About 800 candidates for ordination in the Church of England come from the Eighth Army."—Announcement by the C. of E.

"British exports in April reached a new high level of £2,500,000 a day."—Mr. Marquand, Secretary for Overseas Trade, London.

"More than 90% of rubber trees in Borneo and Malaya are intact."—Mr. T. B. Barlow, Chairman, Rubber Growers' Association.

"The demobilisation of the Russian Army has been proceeding in a much bigger way than people abroad imagine."—Mr. Alexander Werth.

"B.O.A.C. have operated during the past forty months without a fatal accident to a passenger."—Lord Winster, Minister of Civil Aviation.

"America is offering Dakotas to the Chinese Government for £3,000 each; the r production cost is about £25,000."—Air Commodore Harvey, M.P.

"Britain spent considerably more on the development of radar than the £500,000,000 which was spent on the atomic bomb."—Sir Robert Watson-Watt.

"The House of Commons contains a big bevy of Brigadiers, a considerable clutch of Colonels, and a monstrous mass of Majors."—Mr. Derek Walker-Smith, M.P.

"Great Britain, which has already made one contribution to UNRRA, has agreed to a further contribution of £75,000,000."—The Chancellor of the Exchequer.

"The total national income of Britain—that is, the incomes of everybody added together—last year totalled £10,200,000,000; in 1938 it was £5,700,000,000".

—Mr. George Darling.

"Never has a Fighting Service become such an Empire force as the R.A.F. did during the war. I suggest that an Empire Air Force should be created".

—Mr. Max Aitken, M.P.

"In four years of war the United States of America suffered a little more than half the number of deaths that occurred in the American Civil War".—

Professor Sir Henry Tizard.

"When I left Gibraltar at the beginning of 1944 more than a million tons of rock had been removed as a result of wartime tunnelling."—Lieut.-General Sir Noel Mason Macfarlane, M.P.

"The lost foreign assets and new foreign debt of Great Britain amount to £4,000,000,000, or nearly double the damage done by bombing and damage done by German submarines".—Mr. Fred Vinson, U. S. Secretary of the Treasury.

"By March 31, 1946 the number of people engaged directly on war work in Great Britain—in the Forces and civil defence and munitions—had fallen from 9,116,000 on V. E. Day to 3,949,000."—Official statement in London.

"There are now only 60 people in Britain with £6,000 a year left after paying income-tax; in 1939 there were 7,000. Or, if you take a lower figure, 75,000 people in 1939 had more than £2,000 a year left after paying income-tax, whereas now there are only 34,000."—Mr. Ernest Atkinson.

"Of 10,502 ex-officers registered as unemployed by the Appointments Department at the Ministry of Labour in London, thirty have asked for a salary of £1,500 and over, and 241 for between £1,000 and £1,500".—Mr. Ness Edwards, Parliamentary Secretary to the Ministry of Labour and National Service.

"The road from Jerusalem to Jericho is better than the road from London to Brighton. The administration of the P rt of Haifa is as good as Liverpool. The streets of Tel Aviv are cleaner than any city in England. Why, oh, why, don't we tell the world what we have done in Palestine?"—National News Letter.

"During the recent war nearly 51,000 officers and men of the Royal Navy excluding the navies of India and the Dominions and excluding the Royal Marines, were killed or are missing. This number exceeds by over 20,000 the numbers killed in the Navy during the war of 1914-18".—Mr. A. V. Alexander, M. P., First Lord of the Admiralty.

"I once received an order for two autogyros from the Chinese Government. The colour scheme was to be red and cream, to appeal to our Chinese friends, but when the aircraft were taken out of their crates they were found to be painted pale blue, which is the Chinese funeral colour. No one would go near them."—Air Commodore Harvey, M. P.

"One of the sure signs of true power and authority is a willingness to admit mistakes. The man whose authority is sound and whose motives are right has no fear of admitting that in this or that case he was wrong. It is the man who doubts his authority who feels he cannot afford to admit himself mistaken."—The Rev. R. F. V. Scott.

"With the arrival within the next three years of air liners with a cruising speed of more than 400 m.p.h. passengers for America will leave London at midnight (British time) and arrive in New York at 7 a.m. (American Eastern time). Eastbound they will leave New York at 5 p.m. local time and land in London at 10 a.m. (British time)."—E. Colston Shepherd.

"For several years I helped to instruct in the Hong Kong Flying Club. Although subsidised by the Hong Kong Government we were not allowed to teach the Chinese to fly; Europeans, yes—even Germans—could learn to fly at the expense of the Colony. There were probably a million young Chinese subjects there who could claim British nationality, but neither there nor at Singapore was there a scheme whereby they could learn to defend their land in the air. If we had taught them, the result of the battle at Singapore might have been different".—Air Commodore Harvey, M.P.

"In the Luftwaffe the shortage of liquid fuel become insupportable as from September, 1944 onwards, since as from that date the allocation was cut down to 30,000 tons a month, whereas the monthly requirement amounted to between 160,000 and 180,000 tons. So far as the Army was concerned, the shortage of liquid fuel, which in this case was also due to supply difficulties, first became catastrophic at the time of the winter offensive of December, 16, 1944; and this was substantially responsible for the rapid collapse of the German defensive front against the Russian break-out from the Baranovo bridgehead. There were approximately 1,500 tanks ready for action, but those had only one or two fuel supply units and were consequently immobilised".—Dr. Albrecht Speer, former Reichminister for Armaments.

The "Lord Nelson Pension"

The "Lord Nelson Pension" under which £725,000 has been distributed since it was initiated in 1805, is to be stopped. Legislation is to be introduced in the House of Commons cancelling the annuity of £5,000 paid to the heirs of the brother of the first Lord Nelson on the death of the present Earl or his heir—his brother—should he survive him.

The present and fourth Lord Nelson, who is 88, lives a secluded life on his estate at Trafalgar House, near Salisbury. Since he succeeded to the title in 1913, he has drawn about £160,000. His connection with the great sailor is remote, for Horatio Nelson (the first Earl) died childless. So the title—and the annuity—passed to his brother, the Rev. William Nelson, who also died without a heir, and his nephew Thomas Bolton was created Lord Nelson. He continued to receive £5,000 a year.

The present Lord Nelson's brother and heir, Mr. Edward Agar Horatio Nelson, who is 85, also lives at Trafalgar House, which was bought by Nelson's family for £90,000. The money came out of the original £120,000 voted to them by the Parliament of 1805.

ENGINEERS IN INDIA'S MODERN ARMY

By LIEUT-COLONEL B. D. KAPUR

FIGHTING soldiers are in the headline news; but working humbly, obtrusively, and exposed to dangers of the front line at times, have functioned the engineer organisations—the Sapper, the Signals, and the Electrical and Mechanical Engineer—demanding skill of the highest order in manipulating the latest machinery devised and designed to bring wars to a speedier end.

Now the war is over the feats of these engineers on the battlefields, and the stupendous advancements made as a result of nation-wide concentrated researches will be gradually unfolded. Thousands of men gained manual skill and acquired up-to-date technical knowledge and ability through short but intensive wartime courses. Added to this, the versatile and varied field experiences brought knowledge in modern engineering to its peak in the Army.

Will this knowledge, gained at the heavy cost of lives and strained national finances, be allowed to rust and relapse to pre-war standards?

The Signals and the E.M.E. the two offshoots of the Royal Engineers of World War I, developed into fully-fledged modern and independent Corps in World War II, the I.E.M.E. being an offspring of the late war. Set on an independent footing, these Corps are now concentrating on the production of the post-war technical officer in the Indian Army. They all, in addition to developing his soldierly qualities, desire to make him an up-to-date technician.

But alas! the scope for development in India is limited, owing to the immature field for technical training of officers. Naturally, the tendency is to turn overseas for advanced training. This much, of course, seems to be realized, that the foundation of the potential technical officer has been laid in the Indian National War Memorial Academy. It is purely the technical aspect of his training that appears to be the problem. If the need for a modern Indian Army is realized the necessity for a self-contained technical institution raised on modern lines, follows as a corollary. How can this desire be fulfilled in the best interests of the nation?

Before World War II Indianization of the officer element of the technical services was just begun. Among the Indian Engineers a limited few had graduated from Woolwich; a few more joined them from the Indian Military Academy. The Signals had their first Indian Officer from the I.M.A., and thereafter every six months one came into the Corps. The scope of Indianization was restricted and the post-graduate or the advanced training of officers was of a very haphazard nature.

To begin with the Enginee's were very fortunate. Upon graduation from the I.M.A. a full three years honours course was undertaken by them at the Thomason Engineering College, Roorkee, recognized as a first-class Engineering Institution. But unfortunately the facilities of such high-class training were made available only to the first few graduates from the I.M.A. After that the Engineers adopted the normal Army methods of instruction, that is short, condensed irregular but practical courses, hoping to make engineers without the necessary theoretical grounding.

In the late war communication engineering made great advances. India had no amateur talent to come to the rescue of the rapidly expanding Signal

Corps, and British man-power provided most of the technical personnel. However, condensed wartime courses in modern equipment followed by actual installation and maintenance of the most complex equipment under field conditions, gave valuable experience to the Indian Signal Corps personnel. Indians who would never have dreamt of seeing such equipment had the opportunity to handle it. And the men who handled it were educated only in the rudiments of communication engineering practice. Before the war they were known as the "Jhandiwalas," i.e., the flag-wagers. The few officers of the Indian Signal Corps underwent a 21 months' course of training at Poona and Jubbulpore, and received the best instruction possible in those days. But the courses lacked continuity and regularity of instruction.

That the late war gave a good shaking up to our self-satisfied standards of efficiency cannot be denied. It was a rude awakening. It found us extremely lacking in even the fundamentals of technical knowledge. Our senior officers have been charged with "the blank horrors who talk in their own language meaninglessly and give authoritative decisions, relying solely on their war-boosted ranks." Will this do for the future of a Corps that in technique has developed into a horde of specialists? It gives one a nightmare to think of relapsing to pre-war standards. What then?

To maintain modern standards, we have to leap right ahead of our pre-war standards. What is more, the speed in advancement of modern science is showing no signs of relaxation, and calls for careful thinking in planning the advanced studies of our modern engineers. Three courses are open:

- (a) Improve the pre-war courses as taught in military schools of instruction, and for advanced studies send the cadets to recognised technical colleges in India, such as Maclagan College, Lahore for I.E.M.E., Civil Engineering College;, Roorkee for civil engineers.
 - (b) Make arrangements in the U.K. for advanced training.
- (c) Raise a combined Technical College in India which would give advanced technical training to all military engineers, including instruction in higher science for Royal Indian Artillery Officers.

The first course can be ruled out as too much of a makeshift affair to achieve any modern high standard. The second course is now being adopted. Every technical arm is vieing hard to send its officers for advanced training to U.K. Candidates selected are officers who underwent short courses during the war, and earned plenty of field experience, which made them practical-minded but sadly lacking in knowledge of the fundamentals of all-important theory.

The third course, a combined Technical College (call it a Milltary Science College), is a more suitable answer. An institution of such a nature, if established, would have many advantages, among them being:

- (a) By centralising technical training for all engineers, the maximum possible economy in expenditure would be exercised. The first year of instruction for all engineers is the same. All engineers should be sent to this College on completion of *three* years' course at the Indian National War Memorial Academy.
- (b) Post-war training the world over is engaging available instructor material, and India will only be able to get a small share of the best staff. All available resources should, therefore, be pooled, instead of being spread over a number of separate engineering institutions.

- (c) The scientific aspect of gunnery must be given its due importance to maintain modern standards. This form of higher training has been especially provided for in the U.K. and it is imperative that our future gunners should also be given this advanced training.
- (d) The Institution, which would be on the most modern lines, must offer opportunities for high-class training to telecommunication civil engineers as well, for whose instruction no proper facilities exist in India. This is an essential requirement in the development of the national intercommunication system. Railways, the Civil Aviation Department, and the P. & T. should be allotted vacancies to train their telecommunication engineers. Those Departments would, of course, share maintenance expenditure of the Institution, thus reducing the drain on the Army budget.

An investment in such an institution would pay high dividends in modernising our engineers. The heavy recurring expenditure involved in sending potential officers to the U.K. for advanced training, would be a saving towards meeting the cost of the Institution. Science plays a major part in a modern army, and an average Army officer must have a scientific bent. For our engineers such scientific knowledge is even more important. They are all basically scientists. The suggested institution would only provide the foundation training; practical training must also be borne in mind, particularly in peacetime, when the Army has little to do.

Most of the high-grade technicians of the Army in the late war came from the U.K. In future wars India will have to draw upon her own civil technicians. Why not start working to that end? We have been taught our lessons. Lack of liaison between the Army engineers—civil, mechanical and telecommunication—and those of the allied civil technical departments, particularly the Indian P. & T. and the Railways, became most apparent. Lack of knowledge by Army officers of the organisation and functions of the civil departments, and the failure of the civil officers to fully appreciate the capabilities of the Army engineers and the requirements of the Army, led to difficulties in co-operation. Hence for the future we must foster mutual understanding between the Army and the civil technical services, and for this purpose officers should be given a quota of vacancies in the civil technical services for a tour of duty, say three to four years.

This training will form a sound foundation for our future engineers in the Army. Instead of learning with the feeling of working for no concrete results, they would learn to produce profitable work in peacetime. Temporary bridges erected on schemes, "for scheme purposes only," cannot make practical engineers. Those who have learnt to build with the knowledge that their structures must last a lifetime, will have much to give to the Army when the time comes. Co-operation between the civil and the Army thus automatically instilled will breed mutual trust and understanding.

It is understood that quite a large number of the civil engineers will be encouraged to take up A.I.R.O. commissions in our post-war Army to acquire requisite knowledge of the Army. The sooner these water-tight compartments, into which all departments (Army and civil) in India have shut themselves are broken, the better opportunities would accrue in producing modern engineers on a national basis. And now, when all future plans are being formulated, is the time to take action.

To keep our knowledge in line with the Armies of other countries, it is essential that a proportion of our engineers should be attached to other Armies

in the Commonwealth of Nations. The advancements made in U. K. and America are far ahead of what India will achieve for a long time.

Attachment of our engineers to foreign armies on tours of duty lasting from two to three years should be a special feature for the regular officer of the postwar Army. To make the best of these tours, officers should on their return, be made to impart the knowledge they have gained by a visiting tour round India to as many establishments of the Corps concerned as is possible in, say, six months.

Specialization will still have to be acquired through this foreign training. The research worker must still find his tuition and guidance outside India, But as industry develops and our scientists undertake these aspects of engineering we should become self-contained.

This trend towards modernisation has been accepted in all phases of life in India in the post-war years. India is already far behind the rest of the world in the march of time. It will take time to catch up. The late war put the clock forward. If only the tempo of this progress could be maintained, we should be heading for a great India, with a modern Army and modern armaments. No Army can be modern without scientists at its beck and call. The Indian Army to be modern, therefore, must keep its scientists, its engineers up to the mark. The only way to keep pace with other nations is to base our training on sound foundations within India, and then look overseas to broaden the outlook and increase the experience of our engineers.

POST-WAR INFANTRYMAN'S INDIVIDUAL TRAINING

BY "SPERO."

WHAT are to be the lines on which the post-war Infantry soldier will receive his individual training? The following thoughts on the subject (though given only in broad outline) may be of interest.

First and foremost, I feel there will be a tendency to go back to pre-war methods. This tendency must be fought at all costs. I do not suggest for a moment that all our ideas were wrong, or that our training did not include some good features which we can continue. We have, however, advanced in our methods, and in our type of training, to an almost revolutionary degree, and we should hang on to them.

Here are some examples to illustrate my meaning:

Dress.—There is a tendency to go back to collars and ties. Why, after all these years of struggle for commonsense comfort, should we return to discomfort and extra expense?

Drill.—One can see the January 1 parade, and other parades of a similar type, coming back, with all their complicated ceremonial and great waste of time. Why reintroduce the "present arms"? Many of us had hoped it was dead for all time.

Training.—We never trained in the jungle before the war, and have now reached a high standard in this all-important form of training in the East. I feel there will be an inclination to quietly drop this type of training—which many of us realise is essential—owing to the difficulties of finding suitable training areas. We shall need to press heavily for the retention of jungle training.

* * * * * * *

What should the Infantry recruit be taught in the first twelve months of his service? I suggest the following as a basis. The subjects are in no particular order of priority:

Education.—I presume that in the future all Training Centres will have their own cinema and film library, and that instruction by the use of films will be used extensively. Geography will probably be taught by diagrammatic pictures on films, while many other items of common every-day knowledge will be dealt with by the "travel film" system. Numerous military subjects, and knowledge of weapons, will be taught with the aid of the cinema. I feel that its use in this sphere will be constant.

Weapon training: rifle, bayonet, L.M.G., grenade, discharge cup, M9 A, 1., Sten, 2" mortar, revolver and what have you. The recruit will have to fire with his rifle and automatic at formal targets on formal ranges for his first nine months, for otherwise he will never get grounding or confidence—but thereafter, never, except for an annual zeroing check-up.

As far as the rifle is concerned there should be no teaching of rapid fire, and no firing at distances over 300 yards. (The 2" mortar and M. M. G. take on further ranges). Grouping and snapshooting should be concentrated on—and that applies also to the L. M. G. Let Meerut conform, and also introduce competitions for such weapons as the 2" mortar, etc.

A brief reference to bayonet training: what has never been taught is how to charge "all out" for, say, 30 yards. It is not easy to run "all out" with the bayonet in a menacing position. This charge, with a parry, is all that is needed in bayonet training. We all realise that skill-at-arms is vital in war, that there are many more weapons to learn than heretofore, and time must be found for training in them. Therefore please consider the next par:

Drill.—What we want is a man with a smart, soldierly bearing who can walk and salute with a swagger, and also maintain a good turn-out. But we have got to save time for other more important subjects, at the same time as insisting on smartness of bearing and turn-out, for nobody will deny the value of both of those items in training for war. All ceremonial should be cut out except for the pre-war Quarter Guard, which was good value and has other factors to recommend it. Column of "threes" should be the only formation in which to "march past", and rifle movements should be cut down to the trail, and shoulder—no others.

If the highest standard is insisted on, all the essentials will be found in the above suggestions.

Field-craft tactics.—For the recruit these should be confined to the individual stalk, up to section competitions. This will involve real and continuous crawling practice, and the use of camouflage of all kinds. I doubt whether this has even yet been thoroughly taught. It is, however, the basis of all Infantry movement.

The recruit should also be given considerable instruction in all forms of elementary night work. One can safely say that this irksome form of training is still a neglected subject, and undoubtedly we have suffered more casualties than we should by its neglect. It must, therefore, be an important feature in the recruit's basic training.

Toughening.—P.T., boxing, swimming, wrestling, games (hockey and football). Boxing will, we hope, be basic for the recruit in the future. With the exception of P.T., the remainder of the above subjects are more often than not taught by most indifferent instructors. But they are subjects which go to make the versatile infantryman, and unless taught by first-class instructors, and by proper methods from the very beginning, they will never be correctly learnt.

I have touched on the subjects (only in broad outline) which will employ the recruit's time during his first nine months in the Service. The last three months of his individual training should be devoted to jungle training. Already he will have worked a great deal in the open, and a final polish in open warfare as a member of the platoon can be completed when he joins his unit.

There is no need for me to go into any great detail of what "jungle training" involves; our present Training Divisions can supply all the answers. Briefly, it is carrying on the individual training of the man under the far more difficult conditions of the jungle. It is by no means a breakdown in all that he has learnt before, for it merely carries on training from a different and more testing angle. Jungle training also begins to train the recruit on a higher plane, and includes such subjects as advanced watermanship, section and platoon patrolling exercises, and advanced toughening exercises, etc.

Jungle training is a subject which must be taught under expert supervision and by up-to-date methods in some special formation devoted to the subject. It is highly improbable that the average training centre, or the unit to which the

recruit is going, will have the time, training area, or facilities, to train the newly-joined recruit in individual jungle training.

If the recruit (including the young officer) has once learned his "jungle," then even after a lapse of some years it will only take him a short time to get into the swing of it again. We knew but little about it at the beginning of the late war; we learnt about it the hard way. We are the world's experts now, and we should remain so.

This final three months of jungle training will introduce the recruit to guns, tanks, air support, etc., which is another reason for the establishment of some special formation to handle the final "polishing" stage; Training Battalions will not have these training facilities, except for the cinema. The important thing to ensure is that the recruit arrives in his unit a really well-trained, versatile rifleman.

INDIA'S WAR-WEALTH AND NATIONAL PLANNING

By LIEUT.-COLONEL Y. S. PARANJPE

"Every up-to-date dictionary should say that 'peace' and 'war' meanthe same thing, now in posse now in actu. It may even reasonably be said that the intensely sharp competitive preparation for war by the nation is the real war, permanent, unceasing; and that battles are only a sort of public verification of mastery gained during the peace interval."—W. James, in "Memories and Studies".

TO talk of the preparation for war, when the world's most destructive war has only just ended and when the U.N.O. is straining every nerve to banish war off the face of this planet, is the height of cynicism.

Reading between the lines of press reports of speeches made in the U.N.O. meetings, one does, however, get more than a little suspicious of the success of the organization. Human nature being what it is, the desires for domination, spheres of influence, racial and colour prejudices, religious fanaticism and blind and uncompromising adherence to various "isms" exist in the world to such an extent that preparation for another war—at least for a non-aggressive, self-preserving war—is essential for the existence of a people.

In his classical work, The Nation in Arms, Von der Goltz wrote: "Wars are the fate of mankind, the inevitable destiny of nations; eternal peace is not the lot of the mortals in this world." Some of us may not believe in this expression of typical Prussianism, but such sentiments cannot be ignored. This reminds me of my mother's advice to me when, as a boy, I first started to drive a car. She said, "Be careful. You may consider yourself a good driver and may abide by all the rules of the road, but what about the other fellow?" In this world one has always that other fellow to cope with. Prussianism in and outside Prussia is not dead yet.

Having accepted the fact, therefore, that, whether we like it or not, we may be drawn into another world conflict, let us consider the ways and means by which we can prepare for it.

Modern war is totalitarian. It is waged by a whole nation and not merely by the fighting forces of one nation against another, and it is the nation which does not apply the maximum effort that will ultimately be beaten. That great military philosopher von Clausewitz said that war is an act of violence pushed to its utmost bounds. These utmost bounds in modern times embrace all the available resources and all the phases of life of a nation.

Some time ago the *Journal* published my article "A Wider Aspect of Indianization", in which I stressed the necessity of training the young men of India for planned industrialization of the country for peace and war production. This article examines the question from the point of view of fitting the country to shoulder the burden of "a nation in arms" in general, and from the raw material aspect in particular.

Raw material cannot be produced to order like trained personnel. It depends on the living, mineral and vegetable resources of the country. These

can be improved and the best use made of what is available by modern scientific methods, if they exist in the country. Some nations, like the U.S.A., are more fortunate than others in having most of their requirements available within her boundaries; others have to depend on outside supply.

"War-wealth" means the potential wealth of a nation in all the commodities required for the successful prosecution of a modern war, without any external aid. It naturally includes the financial condition of the country and also the man-power in the broader sense, animal power, raw materials (both mineral and vegetable), the capacity to utilise the raw materials, *i.e.*, the state of industrialization, the food production and the provision of normal creature comforts necessary for the population, this latter being very essential in a protracted war for keeping up the nation's morale.

War-wealth is, therefore, wider and more comprehensive than purely the national monetary wealth, as understood by import and export trade balances and the nation's gold reserve. A rich country in this latter respect may not necessarily be war-wealthy. She may not possess her own resources of, say, petroleum, iron or coal, which are essential commodities for the prosecution of war. In peacetime such a country may import these requirements in exchange for other articles she can spare; but this automatically lowers her war-wealth according to our definition. Money, on the other hand, is "the sinews of war" and as such is the integral factor in a nation's war-wealth.

War-wealth may be increased by a nation by acquiring material resources outside her own boundaries and by keeping her communications to the sites of the source secure even in wartime. This will, however, entail commitments for land, naval and air forces away from the main theatre of operations, thus reducing the striking power of the nation at the decisive place.

A nation may also increase her war-wealth by resorting to storing, in peacetime, material likely to be unobtainable in war. Modern war demands are, however, so great that these stores can only provide for a struggle of short duration. In a long-drawn out war, due to a lack of replenishing capacity and possible break of communications, such a method may prove fatal.

England and Germany, as they were before the last war, may be quoted as examples of these two types of nations. Neither had adequate war-wealth, though both could be called rich countries as far as their assets in commerce and industries went. Due to her geographical position and her naval strength, the former maintained the inflow of material, and as a result her war production all through the war remained at a fairly high level. Germany, on the other hand, fully realising her weakness as to her ability to maintain her communications, collected large stocks of stores and material. The war, however, lasted longer than she originally catered for, when she had to look round for fresh sources of raw material. This involved her in more campaigns and further bankruptcy in her war-wealth, resulting in her ultimate collapse.

War-wealthiness, in other words, is the capacity for national self-sufficiency or, in modern language, autarchy. To attain autarchy is the constant aim of every powerful nation. Empires, spheres of influence or occupation for the maintenance of law and order are all part and parcel of the same policy of striving after self-sufficiency. Tug-of-war for oil in Iran, control for rubber in Malaya and Indonesia. annexation for Miri oil of Sarawak, all tell the same story of autarchy.

Modern war makes great demands on a nation's natural resources. Oil, ferrous or non-ferrous metals, nitrates and other chemicals, rubber and timber are only a few examples. Uranium is now added to the list. Lack of such material has enormous influence on the national strategy. The birth of the idea of "blitzkrieg" was a logical result of incapacity of Germany to continue a struggle for a long time. Murray Harris writes in his Logic of War that in 1914, "the Hohenzollerns had put off zero hour for World War I, until adequate synthetic nitrogen capacity had been put into operation and the country became independent of Chilean nitrates.....Due to the Haber process, by 1914, production was in full swing and this relieved the German General Staff for the first time of the fear of a possible shortage of nitrogen for their armaments; reassured on this point they had no hesitation in bringing to fruition their plans for plunging the world into war".

This is the story of one item, the nitrates, and its effects on one of the bitterest struggles of our times. It only proves how strategy is not only intimately connected but entirely dependent on a nation's capacity to conduct a war on her own resources—or war-wealth.

The morals to be drawn from these and other past experiences are:

- 1. That every possible raw material source in the country must be prospected, tapped and developed.
- 2. That adequate arrangements must be made to acquire and store the material lacking in the country. A continuous flow of it in peace and war into the country must also be ensured.
- 3. That adequate and efficient transportation agencies must be provided to guarantee this flow.
- 4. That the industries of the country must be so developed as to be able to convert indigenous as well as imported raw material into all possible requirements of peace and war.
- 5. That the Defence Services must protect the Ls of C. and the industrial areas to allow the above to be carried out, uninterrupted by enemy action.

Let us study the first lesson—the development of indigenous raw materials. Raw materials do not merely mean mineral and agricultural products. Every aspect of life is affected by a war in these days and the whole of it must, therefore, be mobilized if the nation is to be made fit to face the blows and ravages of war. The hub of the wheel of a nation's life is obviously the man.

Von Clausewitz has said that war belongs to the province of social life. To conduct a well-planned war, therefore, one must begin with a well-planned social structure. This in its turn depends on the whole life of the people—physical, intellectual and moral, or in other words, their body, mind and soul.

We have in this country 400 million human beings. A very conservative estimate of the men within the working and military age of 18 and 40 would be 80 million. There is a French saying that the good God is always with the big battalions. If a large collection of poorly educated, ill-fed, ill-clad and indisciplined people were considered to be capable of forming big battalions, we should never have lost the aid of the good God and Indian history would have been written differently. He, however, dessrted us to join a better organized and better equipped people, though they were few in numbers. There is, therefore, only one

method of attracting God on to our side and that is to organize ourselves. For this people must have—

- (a) Better health, which is the foundation of all the rest,
- (b) Better education,
- (c) Better discipline, and
- (d) Better character.

This will produce a better generation of people; like bright steel out of crude and coarse iron ore. This finished material will then be in a position to fill the gaps in our national organization in peace or in war. We shall have so much of this that we shall never have to juggle about with our man-power. There never will be a man power problem for us like the Western nations had in the last two wars.

Another aspect of life of the people which is increasing in importance is the maintenance of high morale throughout the war, which will in future be waged more and more against the civilians than the front line. There are two main weapons used in this attack on the civilians, air attack or attack by long range projectiles, and propaganda. Moral damage is the object of both these weapons. The first achieves it through physical fear and the other through mental weakness. The greater the devastation, therefore, the greater will be the effect on the morale and consequently on the life of the people and their wartime activities. The rate of the industrial production will decrease, panic will set in and finally the will to win will collapse. The exodus of people from Bombay and Calcutta, even before the latter was actually bombed, proves that unless steps are taken to discipline the people, this will prove disastrous in the next war. With the advent of nuclear energy as an instrument of war the effects will increase several fold. Similarly, propaganda will do considerable moral damage, if the people are shaken in their belief in the existing government and the right eousness of the cause they are fighting for.

Patriotism, discipline, character and education to remove the fear of the unknown are the only antidotes to this. People must be taught to "take it".

Another living raw material is the animal—the quadruped species and the birds (poultry). These are of value not on'y as food but as working animals on the war and home fronts. Improved breeding with if necessary imported strains, scientific feeding and tending will produce good horses and mules as war animals, milch cows, bullocks for the agriculturist, better meat and eggs for food and wool for warm clothing.

The food situation in India as a result of failure of crops this year needs no comment. Even when there is no famine, the produce of grain per acre in most parts of the country is, at present, about the lowest in the world. Connected with the question of farming are many points which require minute study; some of these are artificial fertilization, canals, erosion of the soil and afforestation. Food is the first essential in maintaining a nation's morale. Every other kind of privation is cheerfully accepted by a man, but not the sight of starving women and children at home.

Besides food cultivation there are other vegetable products, such as rubber, vegetable oils, medicinal trees like cinchona, which can only be obtained in sufficient quantities if scientific and well organised plantations are encouraged.

Finally, there is the underground wealth. Geological survey of India has not yet been thoroughly carried out, and there are many experts of the opinion that unlimited mineral wealth exists in the country. The existing mines and their products will not be enough even to replace the losses of the first few battles in a great war. During the last war England and other nations had to conserve metals and even use scrap to meet the war demands, in spite of the fact that their mineral output was much greater than that of India's.

The following table shows some figures of the mineral output of certain essential items in India and other countries. The figures are approximate, and in thousands of tons; 'x' denotes small quantity.

	Coal	Iron ore Co	pper ore	Peîroleum
India	30,000	2,800	288	400
Great Britain	240,000	14,500 .	•	
Germany (prewar)	200,000	6,000	1,120	450
U.S.A.	600,000	61,000	1,000 24	10,000

This table will convince one of the urgency of prospecting and developing to bring Indian production up to the level attained by Western countries.

The development of all the various raw materials is interdependent. Human health cannot improve unless there is better food, nor can animals be well-fed and well-bred unless there is food for them as well. On the other hand, unless men and animals are physically fit to do hard work agriculture and industries cannot supply necessary food, fertilizers or modern agricultural implements.

In spite of all these efforts, material which does not exist in the country cannot be produced out of the hat. No nation can be completely self-sufficient. Unavailable but necessary commodities must, therefore, be obtained from neighbouring countries. I stress the word "neighbouring", because the further the sources of supply and the longer the Ls. of C., the greater the strain on the transportation services and the more vulnerable will they be to hostile action.

Further, the greater the threat to these life lines, the bigger will be the forces detached for their protection. In both the World Wars Germany took all possible steps to blockade Great Britain by cutting her life lines. Even temporary successes in her object caused anxiety and alarm in Britain. During these wars disproportionately large British and allied forces were engaged merely for keeping the life lines open. Unless, therefore, one is complete master on and under the sea and also in the air over the area of the Ls. of C., long and vulnerable life lines are a large debit on the balance sheet of a nation's available forces.

I shall here deal with only one or two import items. Let us take the mineral oil first. Until uranium takes its place as a motive agency in war, oil is without doubt an item of priority A 1 plus. It has been estimated that the German requirements per year during the last war averaged about 15 million tons. If this is taken as a rough guide for basing our estimates in any future war, it is obvious that we shall have to look around and see where we can get so much oil from.

The present production of mineral oil in India is just under half a million tons. This is mainly in Assam and Attock. It is, however, believed that there

is a considerable amount of oil available in India which is not yet tapped. As to the neighbouring countries the situation is as follows:—

Quantity (Million tons) Length of L. of C.	Relations.	Remarks.		
Burma 1.6	780 miles (Rangoon to Calcutta)	Friendly	Common land fron- tiers Pipe line to India or to Moul- mein possible.		
Iraq and Iran 11.5 (excl. Kirkuk)	1,100 miles (Abadan to Karachi).		Available only at head of Persian G. Many claimants.		
Sumatra & Borneo 5	2,300 miles (Borneo to Madras).	Unknown. Depends on Dutch & SEA politics.	Long L. of C,		

Other countries beyond this limit are not taken into consideration because of the long lines of communications.

From the above figures it can be easily seen that even with the countries mentioned in the table supplying exclusively to India, the total quantity of oil she can obtain just exceeds the target figure of 15 million tons. The necessity for storage in very large quantities, therefore, cannot be emphasised too strongly. It becomes a vital action in peacetime for success in war. Just as important, of course, is further oil survey and synthetic production. All these will entail a large amount of expenditure, but this must be accepted.

Similarly, tin and lead has to come from Burma and Malaya, rubber from Malaya and the East Indies and copper from Rhodesia. It is interesting to note here that most of the import items that we shall need come from countries bordering the Indian Ocean; haulage of these will, therefore, be over short distances.

All these considerations, quite logically, lead us to the question of the transportation services. Murray Harris quotes the following words of Mr. Wendel Willkie about the last war. "This war," he said, "was often described as primarily a war of production, but it has now been transformed into one that is primarily a war of transportation." There is no reason to assume that the importance of this phase of war will in any way diminish in the future.

The initial and by far the most important agency of transportation is the merchant navy, as most imports have to be brought across the sea. From a study of the trade routes for the various commodities it will be found that the seas over which our ships will have to ply are mainly the Arabian Sea and the Bay of Bengal. In other words it is an oceanic area enclosed by the Asiatic coast on the North and the East, by the African coast on the West and a line drawn from Madagascar to Sumatra in the South. Certain very few items will have to come across the Pacific or from Europe.

India has at present no merchant navy worth the name. As our existence as a nation depends on the carrying capacity of these ships this must receive its

due priority in national planning. A tonnage of five million with a shipbuilding industry capable of turning out a million tons a year to replace war losses should be the initial target.

Next in the sequence, is the railway system for distribution of the imported material from the ports to the industrial areas and later from these areas to the consumers. This applies equally to both army and civil needs. Modern community relies largely on transportation, because everything it consumes must be carried.

Though fairly extensive, Indian railways have some shortcomings from the defence point of view, which is mainly concerned with the use of railways for rapid concentrations of men and material at any chosen point. Firstly, there is the existence of single track only on many a main line. Secondly, the shortage of engines and rolling stock, for which we have to depend on other countries, and thirdly, the bottle-necks caused by the changes in gauges. These faults must be eradicated for the smooth running of the system.

The last link is the roads. All roads utilised in war have to be fit for taking very heavy traffic, not only in the numbers of vehicles, but individual weights. A modern heavy tank weighs 75 tons and these weights are likely to increase. All bridges on the main arterial roads must be built to take up to 100 ton weights, and others to take at least 50 ton vehicles. But improvement in the roads alone will not help to organise better road transport. Transport vehicles for these roads are at present all imported, and these require to be made in the country in sufficient numbers to supply war demands.

Having provided ourselves with all the raw material, animate and inanimate, the next step is to industrialise. Bulk of the articles for peacetime consumption and almost all those necessary in war must be manufactured in the country. In raw materials no country can ever hope to be completely self-sufficient, but finished products must be made here. In war all industry in the country switches entirely on to the production of war equipment and munitions; the civilian requirements are, therefore, cut down to the minimum.

Lord Stamp, who was Economic Adviser to the Government in England, wrote in 1941: "The task of the industry is obviously not to produce the things that the population uses in the ordinary way for the enjoyment of life, but only to provide the most effective means of waging the war, to which all else is subordinate. Every industry that does not contribute to this object must be set aside or restrained in scope." There cannot be a more authoritative declaration to describe the functions of the industries of a nation at war.

This, however, can only be done if the peacetime industries are sufficiently well developed to take on the burden of war. The present is the time to devote every energy in this direction. Western nations are recovering from the effects of the last war, and it will be some time before they attain the production capacities of pre-war days. We are a creditor nation, and every advantage should be taken of the situation to secure a leading place in the industrial world.

Scientific research, I include in industrialization; because on it depends the latter's institution and progress. The most important research for the present would appear to be the one on the subject of atomic possibilities. Uranium in small quantities is available in India at Gaya (Rajputana) and Nel'ore. This research is very expensive, and unless the Government is prepared to spend large sums of money on it, no progress can be reasonably expected.

This brings us to the last but by no means the least important of the lessons—the protection of the life lines and the industrial areas.

In the table showing our possible sources of supply of oil a column indicating the distances of the respective countries from India has been included intentionally. The disadvantages of long life lines has also been dealt with. A short appreciation of what would be the actions in war of an enemy country in the West and in the East of India, will not be out of place here.

In case of a Western country, her first actions to blockade us will be-

- (a) to acquire sea and air bases in Iran,
- (b) to prevent Iranian oil from reaching us,
- (c) to attack our life lines through the Arabian sea. This he will be fairly successful in achieving as far as the limitations of distances for naval or air attack go, except perhaps the route South of Laccadive Islands,
- (d) to make the ports of Karachi and Bombay untenable.

Similarly an Eastern nation will try-

- (a) to enter Burma and prevent all exports to us from that very warwealthy country.
- (b) to acquire sea and air bases in Burma and Malaya,
- (c) to cut our life lines in the Bay and to the East Indies, and
- (d) to make Calcutta, Vizagapattam and Madras very insecure ports.

 Neither of these prospects individually are very bright, but if both occur simultaneously the result will be fatal.

It is, therefore, necessary to think about the possible counter measures. The obvious answer is that the navy and the air force alone cannot prevent this. The only way we can guarantee the supply of oil from Iran and imports from Burma can only be done by a land army on the spot. This is where the diplomatic relations with these countries loom into importance. Our initial object in war must, of necessity, be the security of these two neighbours. Our geographical boundaries may be the Hindukush and the Chindwin, but our strategical boundaries must extend to the Euphrates and the Salween.

Diplomacy here has to play its part intelligently. It is an important accessory in solving the problems of self-sufficiency and defence. The formation and training o an efficient diplomatic corps is, therefore, an essential step, which should be taken without further delay.

To ensure the security of the sea routes, island bases such as the Andamans and Nicobars in the Bay and Laccadive and Maldive in the Arabian sea are extremely valuable. They will act as fixed aircraft carriers and bases for small naval craft. A friendly Ceylon will also be an asset.

India also suffers from a lack of sufficient number of good ports. There are at present only Karachi and Bombay on the Western and Calcutta, Vizagapattam and Madras on the Eastern coast big enough to deal with big ships and their merchandise. For a nation of the size of this country there should be many more ports properly developed. Those like Cochin further away from the possible enemy air bases should be selected and build up in peacetime. They will be invaluable in war.

These are not the only commitments of the defence services. They must take their share in the protection of the industrial areas and the internal communications against enemy attacks. They are responsible for active anti-aircraft defence. In this atomic age, when even one plane getting through and dropping one bomb can annihilate entire areas, passive air defence has acquired greater importance. This must be taken full notice of during industrial planning, and industries should be located with this in view. One entire factory town such as Tatanagar is, from its defence point of view, unsound. When land spaces in India are so vast dispersion, use of mountainous country, concealment and unde ground installations must be the guiding principles in all siting. This will increase the cost of production but it is an evil which has to be accepted.

Apart from the requirements of a striking force, the above initial obligatory functions of the armed forces determine the peacetime strengths of the three services.

It would appear that during the examination of this subject, I have not given finance the importance it deserves, though it is the vehicle on which the plans on paper can reach the goal of realism. The continuation of laong struggle will certainly depend on a nation's financial endurance. In a country with an abundance of raw materials, rich in mineral wealth and with a progressive and enterprising industry, monetary wealth is a natural and automatic acquisition. During the last war India was the main base for the Middle East and Burma theatres, her war industries flourished and she established credit abroad. There is no reason why the same process should not continue, if full advantage is taken of the present world situation. Industries, general progress and wealth go round in a circle. For India it can be a virtuous and not a vicious circle.

Another point which I did not touch on is that of Allies, and the help India can get from them. From the world situation it can be safely deducted that any future a med conflagrations will be between groups of nations. Judging from the present state of industrial progress in the Eastern countries, India's neighbours cannot supply her with material for war. Any such help will have to come from countries far away from her frontiers, with long vulnerable life lines. She must, therefore, be prepared and plan to stand on her own legs.

Thus far we have discussed the various factors—social, agricultural, industrial and strategical—which affect planning. To facilitate a proper understanding I have tried to illustrate it diagramatically. The chart at the end shows the evolution process of a country from a comparatively low standard of attainment in the field of the planned development of its war-wealth to a first-class power in the world.

Political changes are occurring in India very rapidly. Possibly there will soon be an Indian Minister for War, followed by, in due course, a self-governing India as a result of H. M. Gs recent declarations. The responsibilities for the defence of the country will then have to be shouldered by the country itself. True, Great Britain and her Dominions may be counted upon to give active support in an emergency, because the safety of this country, as a result of its geographical position, is vital to Britain. Elaborate plans for the defence of the country will be one of the chief concerns of the new government.

Any plans of this nature must be "dynamic", an apt word used by Colonel Garcia to indicate "the highest standard of effectiveness by focussing on the

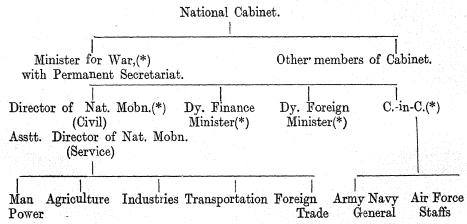
solution of the problem, the maximum of professional and technical efficiency, ingenuity and inventiveness, all passed into service to achieve some aim seemingly unattainable, which static planning would fail even to envisage."

To translate such a dynamic conception of a plan into practice the defence heads must be in a position to get expert advice on matters pertaining to the social and industrial spheres. This will only be possible if co-operation exists between the war department and civil life. A solution is to creat a new department under the Minister for War, called the Department of National Mobilization. This should be headed by a civilian Director and a service Assistant Director of senior rank.

The various branches in this department should also have civil and service personnel employed to ensure that the service point of view is constantly kept in view. The Director should be a member of the War Council, which under the presidency of the Minister for War should have the following as the other members—the C.-in-C., the Deputy Minister for Finance as the financial adviser, and the Deputy Minister for Foreign Affairs as the political adviser. The Council should not be allowed to become an unwieldy body, and additions of further members therefore would be inadvisable. The President should, however, call any one or more persons required to tender advice or to give expert opinion, to sit on it for the solution of any particular problem.

The C.-in-C. in the Council is the strategical brain, combining the three services. He will, after consultation with the General Staffs of the three services, have formed the strategical plan. The Director of National Mobilization is the expert on the national raw materials and industries, and will have planned in consultation with his service assistant. The Financial and Political members are high ranking officials in their own spheres and their opinions will be authoritative. The whole together will then be in a position to do the Supreme National Planning for War.

This organization, as it will fit into the framework of the National Government, is shown below. The asterisks indicate the members of the War Council.



This will ensure complete co-operation and co-ordination of the national war-effort and home-effort. It allows for consultations between service and civil experts at all stages. At the highest level is the War Council, which prepares the final executive plan. At lower levels, members of the departments of War and

National Mobilization can consult each other on problems arising from time to time. For instance on a question about man-power an officer of the Personnel Directorate of the A.G.s Branch can confer with an equivalent civil and or service officer in the Man-power Branch of the Department of National Mobilization. This Department, in its turn, will be able to consult the various other departments of the Government of India, interview industrialists, extract information, collate it and keep it ready as and when required by the War Council. In other words, it will act as a Technical Intelligence Branch dealing with the national war-wealth. In this capacity it will be an advisory body only.

This, I suggest, should be the framework for India's National Planning for War.

To conclude, I would like to quote a passage from F.S.R. Vol. III, Chap. I, to show where the soldier enters the field of national planning for war.—

"The introduction of new weapons and the increasing mechanization of armies, besides influencing strategical and tactical combinations in the field, necessitate the most carefully considered allocation of the national resources for the purpose of prosecuting the war. The demands for warlike stores of all kinds will in any major war only be met by the mobilization of industry in accordance with plans prepared in peace.

"A wise direction of industry and correct distribution of man-power will be as important as generalship in the field. It is essential that the army should keep in touch with the organization of industry and with mechanical developments in civil life, in order to judge how far they can be used or adapted for military purposes, and what effects they will have on operations in the field."

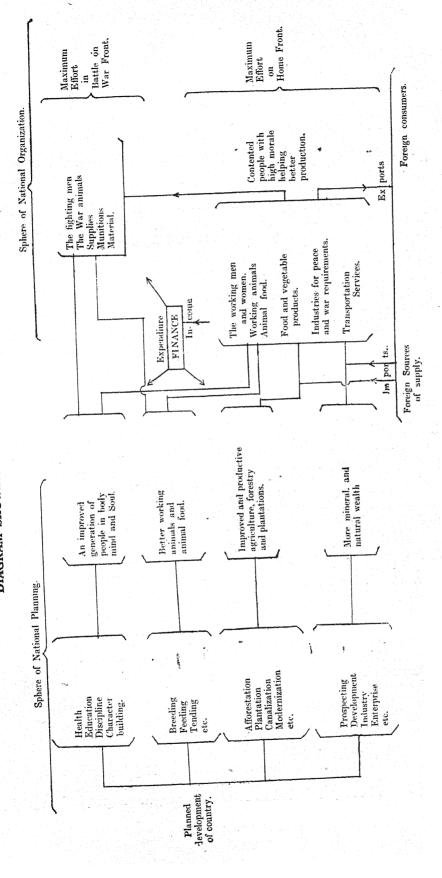
Famous Divisions Disbanded.

The 25th (Ace of Spades) Indian Division, which recently returned from Malaya, has been disbanded. Formed in 1942, it served in the Arakan, and won a great victory at Kangaw. After the surrender of Japan the division, which had gone through two years of heavy fighting in Burma, was sent to Malaya.

With the disbanding of the 25th Indian Division also disappears the 51st Indian Infantry Br gade, the first brigade in the Indian Army to be composed entirely of Indian battalions. The brigade was commanded at first by Brigadier R. A. Hutton, D.S.O., O.B.E., later by Brigadier K. S. Thimayya, and later still again by Brigadier Hutton. Its finest action was at Hill 170, in the Mayu Range in Burma, where during four weeks of fighting the Japanese suffered over 2,000 casualties and lost 26 guns. The Japanese later described the battle as the toughest and fiercest in the whole of the Burma campaign.

The 20th Indian Division, one of the most famous divisions of the Fourteenth Army, has been disbanded. From the time of its entry into the Fourteenth Army in 1942 until the end of the war men of the division killed more than 10,000 of the enemy. Raised in Bangalore in 1942, the division had only one commander, Major-General (now Lieutenant-General) Douglas Gracey. Awards to the division included two V.Cs (Lieut. A. G. Horwood and Jemadar Parkash Singh), 26 D.S.Os. and 152 M.Cs. The division ended its career carrying out occupational duties in French Indo-China, whence it was recently brought back to India.

DIAGRAM SHOWING EVOLUTION OF A NATION IN ARMS



LIFE IN POST-WAR BRITAIN

By Major-General Sir Dashwood Strettell, K.C.I.E., C.B.

IT IS six months since I wrote my last article, and I would that I could say with "Gloster":

"Now is the winter of our discontent Made glorious summer.....

But as a matter of fact in many ways the standard of comfort has deteriorated. In view of the tragedy of possible famine in India, it may seem ludicrous for us in England to complain of our food, but reductions have been made, e.g., in tats, bread darkened and shortly to be rationed, with threats of even further cuts. It is not so much the cuts that have been irritating —it is the continual change in policy and lack of foresight of the Ministry.

If on one day the Prime Minister issued an optimistic view of the future as regards food, the next day the Food Minister would announce cuts, and, from the late Chairman of UNRRA'S statement, it is quite obvious that the warning of coming calamity was issued five months before. In face of existing difficulties the news of the failure of crops in India was almost stunning. It is to be hoped that world sympathy has not been aroused too late. In any case, M. La Guardia is a live wire.

Last time I wrote to you I referred to Lord Gort having had to resign from his post in Palestine. The issue of the Journal containing that article happened to reach me two days before his death was announced. Though one had anticipated the possibility, the news came as a shock, as, four or five weeks before, I had a letter from his daughter which was guardedly optimistic. We went to the Memorial Service in Westminster Abbey, and there was a great collection of notable people in the reserved seats; but what was most striking was the great number of the public who came to pay their last tribute to a great man.

Elections for the County Councils in England have been held since I last wrote, and, except in London, the swing towards the Lett has not been so noticeable as it was in the elections for the House of Commons and for the Municipal Councils. In London the Municipal Reformers lost heavily, and the Socialists majority was considerably increased—end this in spite of a fighting and constructive broadcast by the M. R. leader. Many people attribute the cause of the defeat of the M. R. party to apathy on the part of Conservatives, of whom it is said that only 15% registered their votes.

At the moment of writing the National Health Bill is being debated in the House. Without wishing to discuss the issue from the political angle, the view of the average man in the street is that it would have been better to take the scheme more slowly. In their hurry to show that "Labour Does Things" details are apt to be scamped, and less time devoted to debate. No one could argue against the general principle of the scheme, but many people object to the Minister of Health being placed in the position of Dietator.

The Journal recently drew attention to the Royal Central Asian Society, and your readers may be interested to know that at the last lecture, given by Lieut.-Colonel Cobb, of the Indian Political Service, on "Gilgit", he brought from

H. E. The Viceroy a magnificent head of an "Ovis Poli", reputed to be the fourth biggest head on record, and presented as a gift to the Society, whose crest is the head of that great sheep.

I hope to see something of the representatives of my regiment at the Victory Parade.* Many of us were disappointed to hear that the Garden Party which was to have been held at Hurlingham to meet these soldiers had to be cancelled, but doubtless we shall have other opportunities of seeing them. Incidentally, there were varied opinions held on the wisdom of holding the Victory Parade in London; indeed, several municipalities refused to spend money on the celebrations. It does seem strange that, with shortage of food, ships, money, etc. we should waste those very things on a belated celebration.

It was, however, a pleasure to hear that "Alex" was to fly here from Canada to attend the Parade; and also that Field Marshal Sir Claude Auchinleck (whose promotion to the rank of Field Marshal has been so warmly welcomed) would be able to fly Home and take part in the Parade.

Rarely has so much space been devoted in the newspapers to India, and the work of the Cabinet Mission in Simla and Delhi has been very well reported. Talking of the Press, there is a general desire on the part of the Public that the allotment of paper to the Press should be increased. Owing to the lack of space, journalism is more selective than ever, and newspapers present to the public very one-sided accounts of events. For instance, if one read the accounts of speeches in Parliament in *The Times* and the *Daily Telegraph* they are very different and scarcely recognisable as being reports of the same speeches. And I have no doubt that the accounts in the *Daily Herald* would be still different.

There is a great deal of anxiety these days about the numerous thefts that have lately taken place here in England. To the ordinary man it would appear that we are tackling the problem the wrong way round. The reason for all these robberies is the Black Market, the large prices obtained there, and the ease with which stolen commodities can be got rid of. A considerable stiffening of the sentences for those convicted of dealing in the Black Market would undoubtedly have the result of increasing the difficulty of disposing of stolen property. Fines are not sufficient, but penal servitude dealt out to these menaces to society would have a most desirable effect.

Art Society For Officers

The Army Officers Art Society, founded in 1925 for bringing together officers interested in art and organising exhibitions and disposal of their works, has held fifteen exhibitions, and intends to hold the next early in 1947.

All officers interested, and those who would like to become exhibitors, should communicate with the Hon. Secretary, Colonel L. N. Malan, 10, Blenheim Road, London, N.W. 8, who will send all particulars relating to the Society and the Exhibition.

^{*} This article was written before June 8.

THE EAST AND CENTRAL AFRICA MEDAL, 1897-1899

By Brigadier H. Bullock, O.B.E., F.R. Hist. S.

HIS interesting war medal was instituted in 1899, and had only a short life. being soon replaced by the Africa General Service Medal of similar design but wider scope. It was not issued without a bar: the four bars were "Uganda 1897-98". "Lubwa's", "1898", and "Uganda 1899". All these bars were awarded to Indian troops, who may indeed have outnumbered Africans among the recipients, and with special reference to whose medals this account has been compiled. From the collector's point of view, the medal is rare.

There is no formal history of these campaigns, and none of the minor sources has much to say about the medal; but Major (later Brigadier-General) H. H. Austin's With Macdonald in Uganda (London, 1903) gives valuable details of the fighting in Uganda in 1897. Sources drawn upon include the histories of the old 4th and 27th Regiments of Bombay Infantry, The Historical Records of the 127th Baluch Light Infantry, by Officers of the Regiment (London, 1905), and History of the 1st Bn. 6th Rajputana Rifles (Wellesley's), by Lieut.-Col. F. H. James, O.B.E., M.C. (Aldershot, 1938). The absence of accessible accounts of the 1899 expedition against King Kabarega is remarkable: even Sir H.H. Johnston's The Uganda Protectorate (London, 1902) does not help. From such sources I compiled a short account of the Indian Contingents in Africa, 1891-1922, which was published in the Journal of this Institution in July 1944; and the background given therein has not been repeated here. It is probable that, working in India and in wartime, I have overlooked some authorities; and I should be grateful for additions and corrections. I have derived much assistance from the study of actual medals in my collection or which have passed through my hands.

The medal was ordinarily struck in silver; but a few in bronze were awarded to Indian followers. I have never seen or heard of a medal with more than two of the four bars.

The titles in 1939 of the Indian units of 1897—99 were:—

4th Bombay Rifles

1st Bn. (Wellesley's), 6th Rajputana Rifles.

27th Bombay Infantry (alias 1st

3rd Bn. (Queen Mary's Own), 10th Baluch Regiment.

Baluch L. 1.). 14th Sikhs

1st Bn. (King George V's Own) Ferozepore Sikhs, 11th Sikh Regi-

2nd Royal Bn., (Ludhiana Sikhs), 11th Sikh Regiment.

15th Sikhs

"UGANDA 1897-98".

This bar was awarded to those who took part in the operations in Uganda, other than those against the Sudanese mutineers (for which the "Lubwa's" bar was given), from July 20, 1897 to March 19, 1898, or who reached Uganda between those dates. Three separate bodies of Indian troops received it: (i) the small detachment of about 30 men of the 14th and 15th Sikbs, of which details are given below under "Lubwa's": (ii) the Indian Contingent in the British East Africa Protectorate, about 300 strong, all Punjabi Musalmans, who went up into Uganda in November 1897; and (iii) the 27th Bombay Infantry (1st Baluch L. I.), who arrived at Mombasa from India on December 12, 1897 and then went up-country on the 600-mile march to Kampala on Lake Victoria. Owing to difficulty and delay in getting forward to Uganda, two companies of the 1st Baluch L. I. were diverted to Jubaland, where they took part in the operations against the Ogaden Somalis (see below, under "1898.")

The 1st Baluch L. I. saw a good deal of fighting between the end of March and beginning of December 1898, and their casualties during their whole stay in Africa were 2 Indian officers and 19 Indian other ranks killed, 1 British officer, 2 Indian officers and 20 I.O.Rs. wounded, whilst 1 I.O. and 12 I.O. Rs. died of disease. Many of the battle casualties were incurred in a single affair, the attack on Lieut. Hannyngton's detachment near Kitabu on October 10, 1898, when an Indian officer and 13 I.O. Rs. were killed and Hannyngton and 8 men wounded.

For their gallantry on this occasion the following 17 men of the battalion received the Indian Order of Merit, third class: 2657 Naik Yusuf Khan, 1765 Naik Sultan Mahomed (of the 30th Bombay Infantry, attached), and Privates 2737 Nur Mahomed, 262 Sharif Khan, 20 Ghulam Mahomed, 1441 Nur Dad, 2858 Barkatullah, 153 Shah Zad Shah, 767 Subey Khan, 959 Subey Khan (whose medal is in my collection), 188 Khuda Bux Khan, 403 Fazal Khan, 1361 Shazada Khan, 162 Karam Dad, 1132 Mir Firoz Ali Shah, 295 Sher Dad and 31 Nur Mahomed, whilst it was announced that 296 Pte. Ahmed Khan would also have been decorated had he survived.

I have not seen a complete medal roll of the 1st Baluch L. I. There is in the records of the Government of India a roll of some 340 officers, men and followers of the battalion in which the "Uganda 1897-98" bar (only) is claimed; but this roll appears to have been preceded by another, and succeeded by a third. This piecemeal claiming of medals may be the reason why some are inscribed "27th Baluch L. I." and others "1st Baluch L. I." Both these designations are impressed on the medals.

Two members of the Indian Contingent in the B.E.A. Protectorate also received the I.O.M., 3rd Class, for these operations: 226 Lance-Naik Wazir Ali, 31st Bengal Infantry, for gallantry at Murli on April 26 1898, and Jemadar Bahadur Ali Khan, 1st Sikhs Punjab Frontier Force, for gallantry at Jass Canp

on April 26 and at Murli Post on May 30, 1898.

The number of Indians who received the "Uganda 1897-98" par must have been about 950, making a small allowance for medical personnel, with perhaps 50 tollowers.

"1898"

This bar was awarded to the forces employed in the expedition against the Ogaden Somalis from April to August 1898. They were:—

	Strength
4 companies, 4th Bombay Rifles*	330
2 companies, 1st Baluch L. I.	155
4 companies, 1st Uganda Rifles (Indians)	350
다른 내 시작하다는 그는 그 눈으로 보는 나를 했다.	
[1] 이상 나타를 모르는 사내에 다른 이는 다른 사람들이 살아갔다.	835
3 companies, East Africa Rifles (Africans)	250
	1.005
	1,085

^{*} One Coy. Rajputs, one Coy. Jats, one Coy. Punjabi Musalmans, and one Coy. mixed classes (half Sikhs).

A wing of the 4th Bombay Rifles arrived at Mombasa from India on March 7, 1898, and from this one company left for Kismayu on April 4. Another company followed it about the middle of the month, and another about the beginning of May. One Indian Order of Merit, 3rd Class, was given in this campaign, to 756 Naik Butta Singh, 4th Bombay Rifles, for bravery near Helishid, on Lake Wana, on June 22, 1898. On this day a party of the 4th Bombay Rifles (41 men, mostly Sikhs, under an Indian officer) was ambushed, and 27 including the I. O. were killed. Butta Singh, though himself wounded twice, conducted a skilful and gallant withdrawal with a party of four other riflemen, two of whom were wounded. During the expedition the battalion had several other casualties, including a British officer and a naik eaten by crocodiles.

After the operations were concluded, the wing returned to Mombasa in the latter part of November 1898 and embarked for India in December The four companies of the 1st Uganda Rifles arrived at Kismayu on July 23, 1898 and took part in the final operations.

"Lubwa's"

This bar was granted to all who took part in the operations against the Sudanese mutineers, from September 23, 1897 to February 24, 1898. The engagement of Lubwa's Hill was fought on October 19, 1897, and fighting continued in that vicinity till January. The "hard core" of Indian troops who bore the brunt of it consisted of a small detachment* drawn equally from the 14th and 15th Sikhs, under the command of Lieut. Norman Macdonald, 14th Sikhs, who was a brother of the commander of the expedition and who was killed at Lubwa's on October 19, 1897. This detachment arrived at Mombasa from Bombay on July 9, 1897, and left Mombasa on its final return to India on March 26, 1899. Its strength was one Indian officer (Jemadar Bhagwan Singh, 14th Sikhs), some 30 N. C. Os. and sepoys, and one or two followers.

The total casualties have not been ascertained, but from October 18 till the beginning of December 1897 there were 17 Sikhs† at Lubwa's, of whom 7 had been killed or wounded. On December 7 they were reinforced by Norman Macadonald, who had with him the remaining Sikhs, 15 in number.

Jemadar Bhagwan Singh with two sepoys of the 14th Sikhs (1733 Kaka Singh and 1752 Bagga Singh) received the I.O.M. 3rd Class, for gallantry at Lubwa's Hill on October 19, 1897; whilst for their conduct at the fight at Lubwa's Fort on December 11, 1897 the same decoration was awarded to 3036 Sepoy Sahib Singh, 3277 Sepoy Phuman Singh, 3184 Golab Singh, 3434 Sepoy Bishan Singh and 3385 Sepoy Karpal Singh, all of the 15th Sikhs, and Jemadar Bhagwan Singh was advanced to the Second Class of the Order. For gallantry at Kabegambe on February 24, 1898 the I.O.M., 3rd Class, was awarded to 1545 Naik Sham Singh, 14th Sikhs and 2354 Havildar Attar Singh, 15th Sikhs, as well as to 87 Sepoy Jehan Khan of the 27th Punjab Intantry who was serving with the Indian Contingent, B. E. A. Thus out of the 28 I. O. Rs. of the two Sikh battalions, 9 received the I. O. M., while their Indian officer won it twice over.

A number of other Indian soldiers, though not engaged at Lubwa's itself, took part in the operations at the latter part of the qualifying period and thus received the "Lubwa's" bar. The Indian Contingent in the B.E.A. Protectorate, which was normally quartered at Mombasa, began to move up as a reinforcement

^{* 14}th Sikhs—1 B.O., 1 I.O., 13 I.O. Rs., 1 follower, † 15th Sikhs—15 I.O.Rs., 2 followers.

for Lieut.-Col. MacDonald in November 1897, and 150 Punjabi Musalmans of the Contingent under the command of Major T. E. Scott, D.S.O., arrived at Lubwa's about January 9, 1898. They were followed by Major W. C. Barratt, D.S.O., with 60 or 70 more sepoys, who arrived at Kampala about the beginning of February 1898 and took part in the big fight at Kabegambe which ended the main resistance, on February 24, 1898. Thus about 220 of the 300 men of the Indian Contingent received the clasp for "Lubwa's".

The 1st Baluch L.I. were sent as reinforcements from India and reached Mombasa on December 12, 1897. They then proceeded up-country by detachments, but progress was slow owing to supply and transport difficulties, and by the end of the qualifying period for the medal (February 24, 1898) only two detachments had entered Uganda near the railhead at Ndi. The numbers of this unit who received the Lubwa's bar appear to be 4 British officers, 6 Indian officers, 237 I.O.Rs., and 16 public followers.

The total number of Indians to receive this bar may be estimated at 500, made up as follows:—14th and 15th Sikhs, 33; Indian Contingent B.E.A., 220; 1st Baluch L.I., 243; and a few medical and commissariat personnel.

The 1st Baluch L.I. left for India on May 11, 1899, without having taken part in the operations against Kabarega and thus not qualifying for the "Uganda 1899" bar. An account of the detachment of this battalion which received the "1898" bar has been given above.

I have not seen any of the 14th and 15th Sikh medals, but I have inspected their medal roll in the records of the Government of India. Of their men who were decorated with the Indian Order of Merit, Phuman Singh became Subedar-Major and Honorary Lieutenant, and had the order of British India and the Indian Distinguished Service Medal. Of the Indian Contingent B.E.A. Protectorate medals I have had three. Two were engraved with the name of the recipients followed by "Indian Contingent" (abbreviated), the inscription being in sloping capitals in one instance and in upright capitals in the other. The third medal was inscribed with the title of the recipient's parent Indian battalion (4th Punjab Infantry), being engraved in sloping capitals. All three were two-bar medals—"Uganda 1897-98", "Lubwa's"—and awarded to Punjabi Musalmans.

All the 1st Baluch L.I. medals which I have seen have been impressed, not engraved, in small capitals as used for example on the Queen's South Africa medals; but the battalion is variously given as 1st Baluch L.I., 27 Baluch L.I., and 27/Bom. Infy. It is sometimes stated that all East and Central Africa medals were issued unnamed, but this cannot be correct, for the 1st Baluch L.I. medals are obviously officially named, probably at the Royal Mint in London. A very few medals with the single bar "Lubwa's" were issued. I have never seen one, but I have verified from the roll that two followers of the 15th Sikhs received such medals, though whether they were in bronze or silver is not clear.

Three battalions—the 4th Bombay Rifles and the 24th and 27th Bombay Infantry—were in 1901 granted the battle-honour "British East Africa" followed in each case by the appropriate date, the award to the 24th being for their services in 1895-96 in the Mwele (Mazrui) expedition, for which the East and West Africa medal, without bar but inscribed "Mwele 1895-96" on the upper part of the rim, was given.

"UGANDA 1989"

The 1st* Uganda Rifles, which was sometimes (though apparently unofficially) known in its early days as the Uganda Regiment, was an Indian unit formed to take the place of the former Uganda Rifles, most of whose Sudanese mutinied in 1897. It was raised at Poona between February and April 1898. with an establishment of about 400 rank and file in four companies: two companies were Sikhs and two Punjabi Musalmans. The two Sikh companies reached the north shores of Lake Victoria early in January 1899, the British officers being Lieut.-Col. J. T. Evatt (in command), W. E. Chitty, P. B. Haig (Indian Medical Service), and M. L. Hornby. A company of Punjabi Musalmans, commanded by F. S. Keen, followed a few days later: and the last company, under H. B. Rattray, was a week or two behind it. Part of the unit, perhaps one or twocompanies, received the East and Central Africa medal with bar "Uganda 1899", for the operations against Kabarega between March 21 and May 2, 1899. Kabarega, King of Unyoro, had joined hands with the Sudanese mutineers, but was completely defeated and captured by a force of sepoys and Baganda under Lieut.-Col. Evatt and was exiled to the Seychelles Islands.

All the above-named British officers received this bar, and Chitty, Evatt and Hornby had the "1898" bar also, for the Uganda Rifles had taken part in the last phases of the expedition against the Ogaden Somalis. †Some of the 1st Uganda Rifles were to receive, for services in the following year, the later Africa General Service medal with bar "Uganda 1900". The original Indian personnel were relieved and returned to India in May 1901, having had a good many

casualties in action or through sickness.

The bar is rare. I have picked up a couple in Northern India, both having been awarded to Sikhs, both inscribed "1/Uganda Rifles", and both having the "1898" bar also. One was neatly engraved in sloping capitals, the other very crudely inscribed in a rough scratch-engraving in capitals. I have had another East and Central Africa medal, with bar "1898", awarded to the Punjabi Musalman quartermaster -havildar of the 1st Uganda Rifles, which was named in exactly the same rough manner and obviously by the same hand, which I suspect was that of the battalion armourer. I have never seen a single-bar "Uganda 1899" awarded to an Indian, and it is probable that few exist as most of the sepoys engaged must have received the "1898" bar also.

The 1st Uganda Rifles became on 1st January 1902 the 5th Battalion of

the King's African Rifles, with a strength of 400 Punjabi Musalmans.

It is difficult to estimate the number of "Uganda 1899" bars awarded to Indians, in the absence of any precise account of the operations. Two Indian companies of the 1st Uganda Rifles—say 200 men—may have been engaged, but the rarity of the bar suggests a much smaller number, perhaps less than a hundred.

ESTIMATE OF MEDALS ISSUED.

The estimated number of silver medals issued to Indian troops is:—
With single bar, "Uganda 1897-98", "Lubwa's" 500
With two bars, "Lubwa's" ? (very few)
With single bar, "Lubwa's" 765
With two bars, "1898", "Uganda 1899" 100-200
With single bar, "Uganda 1899" ? (very few)
No estimate for bronze medals can be given, but they are rare.

^{*} No second battalion was however raised, and the "1st" was latter dropped from the title. † 5 British officers, 1 British N. C. O., 268 Africans, 105 Indians (Punjabi Musalmans and Sikhs). Four of the five British officers belonged to the Indian Army.

THOSE INDIAN DRIVERS!

BY "CHENNAPATNAM"

A Narticle published not long ago concerning operations in the Western Desert said: "The troop-carriers were driven by Indians, and the inability of these Indians to understand the orders and directions given to them by the guides and officers in command of vehicles caused frequent misunderstandings."

The words are expressed by a British Service Officer (who, unfortunately, was afterwards killed in action).

Who were "these Indians....who caused frequent misunderstandings"?

Munisami was born of humble parents in a village in South India. To be more correct, he was born not in the village, but on its outskirts, since the outcastes, of whom Munisami was born a member, are not allowed to live in the village.

With rare exceptions Munisami never knew the meaning of a square meal, nor had he or his parents any possessions of their own beyond the barest necessities of life such as a *dhoti* or two, a few cooking, eating and drinking vessels, and a low, thatched, mud-walled hut.

Munisami's father and mother worked daily in the fields from early morning till evening for a landowner whom they hardly knew. From this landowner they received an allowance of food, just enough to provide one meal a day, also three rupees a month as pay, and occasionally, at the time of a big festival, the landowner would give the family a new *dhoti* or a towel.

The chery (portion outside the village, allotted for the outcastes) where Munisami lived, consisted of the usual low, thatched huts with mud walls. In the adjoining village was a good well, but its water was not available for the outcastes' use. For them the nearest water was about a mile away in a tank which was used also by the cattle. This tank almost dried up in the hot weather, thus making conditions very hard indeed for the outcastes. But nobody seemed to think or worry much about them.

Munisami was of a cheerful nature, like most of his kind, and he did not regard his lot as particularly hard or unfair, though he sometimes thought how fat and lazy the bania was, when he (Munisami) often had to tighten his dhoti over an empty stomach. The bania, fat and greasy, was always to be seen sitting cross-legged behind the wares in his shop. He never took any form of exercise and always drove a hard bargain. Many of the villagers and the nearby outcastes were heavily in debt to him. Once a man borrowed money from the bania, it took him years to pay back the capital and interest. In many cases the debt passed on from father to son.

For a few years Munisami attended the Government school in the village. The scholars from the village were accommodated in the class rooms, but the outcastes, although officially entitled to equal facilities for education, were not permitted to enter the doors, and sat on the verandah picking up as much as they

^{*}This article is based on fact.

could of the lessons going on inside the school. At an early age Munisami left school and went to help his parents in the fields and tending the cattle.

Sometimes a friend would return to the chery from the big city which was more than two days' journey away. What tales he had to tell of life in the city! Of trains and ships, of motor cars and trams, of cinemas (he called them bioscopes) and shops. All so big and so strange-sounding to the boy who had never known anything outside his village life.

Young Munisami's enthusiasm was infected and he determined to leave what now seemed to him a dull village life and go to see the city. Having borrowed a few rupees from the bania, at what Munisami did not realise was an exorbitant rate of interest, and after making his farewells to his parents and friends, Munisami set out for the city.

The first part of the journey was on foot and he managed to get a lift in a friend's bullock cart for part of the way till he reached the main road. Then by bus to the railway. The bus and railway journeys he found full of interest and he had endless conversations with his fellow passengers. There were people speaking languages that were strange to Munisami, wearing different clothes and having other customs. He was rather frightened at the railway station with the crowds and the big trains steaming in and out. That night he lay down to sleep on the station platform amongst the many others there. The journey in the train was scaring at first with the noise and the swift motion. But after a time he became accustomed to the strangeness of everything and found the trip most entertaining.

Then came his arrival in the big city with all its new sights and sounds and excitements. The traffic seemed very disconcerting and the road was clearly no place in which a poor village boy could safely walk!

We must cut short all his impressions of the big city, as they alone would make a long story. After a few days of sight-seeing, Munisami found that his money was nearly at an end. He therefore sought work as a coolie. The work he obtained was for long hours daily, but of uncertain tenure, as it was from day to day only, and the pay was not much. It gave him sufficient for his food and somewhere to sleep, but he was not able to save anything.

Munisami had heard that you could earn good money by pulling a rick-shaw. He saw many rickshaws on the roads and it looked to him to be very heavy work. But he was used to hard work and thought he would try this occupation. So Munisami arranged with a rickshaw contractor for the use of a rickshaw and the next day he took his stand for the new work.

On some days in this work Munisami was unable to earn sufficient money to cover his cost of living in the city. On others, more fortunate, he gained enough to pay for his food and the share of a room, for the hire of the rickshaw from the contractor, for a few beedies and a little spare to put by as savings. But the tax that the work put on his health!

Runs between the shafts of the rickshaw were all much the same, except for the distance and the fares paid by different passengers. The passenger or passengers (there might be two) would mount the rickshaw and tell Munisami where they wanted to go. He would then pick up the shafts, grip them tightly, bend his slender young body parallel with the road, lean forward and heave the rickshaw with its occupants into motion. It was always a strain to overcome the initial inertia and gain momentum. A few paces forward and he would commence to run. Faster and faster would he increase the pace, till he

was bowling along at a good ten miles an hour, feet thrashing the hot, hard surface of the road, slim young body and head bent slightly forward, hands upon the shafts, crying "Varrum! Varrum!" (We're coming, We're coming) to clear the way, dodging in and out amongst the traffic and people on the road. By now he would be panting for breath.

He would reach a street crossing where perhaps the traffic was held up. Back he would throw his slim body and head; arms would straighten as he flung his weight back to check the momentum of the loaded rickshaw to bring it to a stop. The pulling up was hard work but the short check afforded an opportunity to regain some breath and to ease the straining muscles of his legs, arms and back.

With the release of the stream of traffic, again would come the strain into motion of the loaded rickshaw. Off again at a grand pace. The sun was beating down from above and up from the burning road surface; the heat was moist and oppressive. Every now and then Munisami would relax the hold of one hand on the shafts to wipe the streaming sweat from his face, with a piece of rag carried for the purpose. By now his arms, chest, back, neck and legs were streaming with sweat, as well as his face and, in a long run, his *dhoti* also would become soaked through.

A run on a flat road was trying enough, but on hills, both up and down, it was doubly so. Down a hill Munisami would race and it was difficult to control the laden rickshaw behind him. Uphill he toiled with arms, back, legs, lungs and heart all straining; little body bent parallel to the ground, the whole of his lightly-built frame and slight weight thrown forward, sweat streaming from every pore, breath coming in gasps, muscles straining and passengers lolling back at their ease, perhaps not giving a thought to the toiling figure straining them up the hill; not considering the possibility of walking up the hill themselves in order to relieve the rickshaw puller's burden; not remembering that he was very likely hauling more than four times his own weight up the hill.

So to the end of a run. Throw your whole weight back; strain on your arms; bring the loaded rickshaw to a stop; set down the shafts gently; wipe the streaming face; control the heaving chest; hold out a hand for the fare; hope for just payment. Receive what? Perhaps the legal fare and a little baksheesh; perhaps the bare legal minimum; perhaps less than the legal fare. What can he do but accept the sum given by the cool and composed passengers? He has little redress against underpayment and can do little but plead for some slight increase. If the passengers are kindly disposed they may add a mite or two; otherwise they will go grumbling away, leaving Munisami hot, tired, thirsty, exhausted, under-paid and wondering where his next meal is to come from.

Then Munisami would look about to see whether there might be some water available to quench his thirst after the run. If he was lucky there would be a stand-pipe by the road. What matter if the water that came out into his cupped hands was almost burning hot through having been in a pipe exposed to that fierce sun? It was at least water. Or it might be a time of day when the water was turned off (as it is in many places for several hours daily), when he would get none. Thereafter for a time Munisami would sit on the floorboards of the now empty rickshaw in order to cool off and regain his breath, before going off to look for other passengers.

One day a British Officer engaged Munisami for a run and the Sahib spoke Munisami's own language. The run started in the usual way. But after Munisami had been running for a time and on an upward slope of the read, the Sahib told Munisami that he might go slowly. It was hard work running with the rickshaw on the upward slope and Munisami, appreciating the consideration shown to him, dropped from a run to a fast walking pace. At the crest of the slope Munisami again broke into a run and raced down the incline ahead. The exertion of the pull up the hill and the run down the other side brought the sweat streaming from every pore of Munisami's body.

Next came a steep uphill, where it was necessary for Munisami to throw his whole weight and strength into the task of straining the rickshaw and passenger up the steep gradient. Every muscle was tense; breath coming in gasps; sweat streaming off him. A little way up the hill Munisami heard the Sahib tell him to stop and put down the shafts of the rickshaw. To Munisami there appeared to be no reason for a stop and as he continued to strain on up the hill he turned his head with an enquiring look to ascertain the reason why the Sahib should want to stop half-way up the hill. The Sahib said "Stop for a minute and I will walk to the top of the hill."

Many a time had Munisami had to haul two passengers up these hills and he had not encountered this consideration before. He was a willing lad and did not intend to put the Sahib to the slight trouble of having to walk up the hill. He therefore grinned and shook his head in negation, replying "No, Sahib, I can do it all night" and redoubled his efforts on the hill.

At the end of the run the Sahib paid Munisami the full fare and gave him some baksheesh. Then, whilst Munisami wiped his streaming face, arms and chest and somewhat recovered his breath, the Sahib began talking to him. The Sahib asked Munisami whether he liked rickshaw work. Munisami replied that it was terribly hard and that he didn't like it, but that he had to earn a living and had no other work. The Sahib asked Munisami if he had ever thought of joining the Army as a Sepoy and explained to him that it was hard work also in the Army, but good healthy work with plenty of good food, free clothing and good pay, and a good life.

This proposition sounded better to Munisami than the health-destroying rickshaw work that he had been doing for nearly two years. Being of a conservative nature, however, like most of his kind, this new idea required some consideration and Munisami felt that he needed some time to think about it. The Sahib, however, appeared to wish him to agree. Munisami therefore thought it easiest to agree, and did so, without, however, having the intention of necessarily putting his agreement into actual practice.

The Sahib seemed pleased at Munisami's agreement, but he told him to think it over and to meet him again the following day. Munisami promised to do this.

Between then and the next day Munisami thought a good deal about the proposition of becoming a Sepoy. He spoke to a few friends about it. He knew little about the Army. There was a War going on somewhere he knew, but it had not affected him personally very much in the past. The Army was in some way connected with the war he thought. The Sahib had said that it would be necessary to leave this big city if he joined the Army, but that he would be given leave sometimes to visit his home.

If he stayed in the big city, which by now had lost its first glamourous impressions, Munisami could see no alternative other than continuing with the very trying rickshaw work—until his health broke down, as it assuredly would in that work—and then what? On the other hand, the Sahib's proposition had some good points in it and sounded attractive in several ways. Besides, Munisami liked the Sahib and did not feel that he would mislead him with false promises.

When the next morning came Munisami had almost made up his mind to tell the Sahib when they met that he really would like to become a Sepoy in the Army. The Sahib had told Munisami to meet him at 7 a.m. At sunrise Munisami got up, washed himself and went about his other early morning duties. Then he got out the rickshaw and started towards the meeting place that had been agreed upon the day before.

Munisami had allowed ample time to reach the rendezvous by 7 a.m., but on his way there two people demanded of him that he should take them to a place that was some distance off the direct route to his meeting place with the Sahib. Munisami told these two people that he could not take them as his rickshaw was already engaged. There were no other rickshaws about at the time, and the two men became obstreperous and insisted that Munisami should take them. He set off therefore to complete this unexpected and unwanted run as quickly as he could.

As he ran on with his load and the time passed, Munisami began to worry in case he should not be in time to be back to meet the Sahib at the rendezvous at 7 a.m. In that case the Sahib might come and go and he might never see the Sahib again. As he bowled along he passed a clock and saw that there were only ten minutes to go for 7 o'clock. He had already run two miles with his unwelcome passengers and there was a further mile to do before he reached the place to which they wanted to go. From there it would be two miles back to where he hoped to meet the Sahib at 7 o'clock.

He realised now that even if he ran as fast as he could for the remainder of the outward journey and also all the way back, when the rickshaw would be empty, he still could not be at the meeting place by 7 o'clock. However, he would do his best and he hoped that the Sahib would wait for a time and not be too angry with him for being late. So Munisami redoubled his efforts and sped on. At last the outward journey was finished and Munisami brought his loaded rickshaw to a step. With the three-mile run that he had just completed and the extra effort which he had put into it in order to make up as much time as he could, he was streaming and panting hard.

Then the annoying passengers told him to wait. This was too much-he would miss his Sahib—and he became frantic. After several minutes' waste of time by the passengers, they paid Munisami a miserly sum. Not being in a position to spend further precious time, Munisami took the meagre fare and started straight off on his return trip. After running the remaining two miles he at last drew near to the place agreed upon for the meeting, ten minutes late, streaming hot and panting for breath. But, Ram! Ram! the Sahib was waiting there.

When Munisami did not appear at 7 o'clock the Sahib thought that he (Munisami) had decided against becoming a Sepoy, and that he probably would not turn up at all. However, he decided to wait for ten minutes or quarter of an hour, as he knew that Munisami was certainly too poor to be able to afford a

watch and would probably not know the time accurately. So when, about ten minutes past seven he saw Munisami come running up the road, he was glad as he was looking forward to meeting the lad again.

The Sahib felt very sorry for Munisami when, as he drew near, he saw the state that the boy was in after his five-mile run. The Sahib got into the rickshaw and told Munisami that he might walk instead of running. Munisami, grateful, set off at a fast walk. After a time the Sahib stopped him and got out of the rickshaw. They then had a further talk together, at which the Sahib found that Munisami really did want to join the Army.

At the medical examination the Medical Officer was a trifle doubtful about Munisami's heart and lungs and told him that had he continued very much longer with rickshaw work his heart and lungs would not have been good enough for admission to the Army. Munisami felt truly grateful to his Sahib who had saved him from the awful life which would soon have ruined his (Munisami's) health.

Thus Munisami joined the Army.

He went to a Mechanical Transport Company, where he learnt to drive cars and lorries. The boy, who had never driven anything but a bullock cart before, felt that his soul was being released through his foot on the accelerator pedal, with the motive power under his control. Being used to the slow-moving bullock cart, Munisami found it difficult at first to appreciate the speed at which a car or lorry could go. But as the instruction progressed, Munisami became a good driver and good mechanic.

He liked the life also. There was as much good food as a boy could want; far more than he had ever seen or even dreamed of at home or in the big city. He found also that the monthly pay, which did not sound very much, was sufficient to enable him to send his father and mother two or three times the amount that they were able to earn at home and, in addition, Munisami had enough left over to put some into the savings bank and to pay for a supply of beedies, a trip to the cinema and a visit to the bazaar for himself at sufficiently frequent intervals.

Munisami worked hard and well and made many friends in the Company.

Then came the day when Munisami's name, amongst others, appeared to proceed Overseas. He was a little scared, but also rather thrilled, at the idea of going so far away to another country beyond the sea.

Munisami went to Egypt, where he saw much active service driving a 3-ton lorry.

One day a harassed Officer of a British Unit was shouting directions in English to the Indian driver of a 3-ton lorry in the Western Desert. There happened to be no one nearby who could interpret. Munisami was very willing to do whatever was wanted and he did his best, but is he to be blamed for his "inability to understand the orders and directions given" in English which "may have caused misunderstandings"?

They may be trying at times, but they have done—and are still doing—a grand job of work, and they are a grand lot (as everyone will testify who has worked with them), those Indian drivers.

TAKING OVER A COMPANY

BY MAJOR M. J. MOYNIHAN, M.C.

This article is for the benefit of junior officers; it was wirtten in the field and contains nothing that cannot be found in training manuals, but such manuals and certain I. A. Orders are not always available, and this very readable summary may be useful to junior officers.

YOU are taking over "X" Company, and as soon as possible you will want to know who's who and what's what in your new company, so that you can go ahead with training.

Who's Who. (a) On the Ground. In a four-class battalion like ours, taking over a Company really involves taking over a Class. Appointments, transfers and promotion concern not only your own company, but the men of your Class in H.Q. Company and Administration Company as well. Therefore hold a parade of all the men of your Class in the Battalion. Fall them in in order of seniority (and check the long roll as you do so). That will show you who's who on the ground. It also makes it clear to everyone concerned that you have your eye on him.

(b) On Paper. Not all your men will be present; some will be on leave, in Reinforcement Camp, in Training Division or Centre. Next thing therefore is to get your complete "Who's Who" on paper; work it out from your own nominal rolls and check and complete them from records in the Adjutant's Office. Make a numerical summary of these nominal rolls, after which you can begin thinking about recommendations for postings and transfers.

In making these recommendations and in running your company generally, you will want to know a great deal more than the mere strength, seniority and War Establishment of your class. From personal contact and from the records find out the qualifications of each man; start with the Section Commanders. If possible, run an N.C.Os cadre. Get the N.C.Os together and tell them what you expect of them.

Tell them their first duty is to know their men; get them to make out a "Section Long Roll" of their sections; give them a pro forma—and an envelope to keep the roll in. When anyone joins the section get the Section Commander to parade the new man with the long roll, his kit inventory and A.B. 64, so that you can check the new man in.

COMPANY RECORDS. These should be designed to show you at a glance: (i) What specialists you have; (ii) men who have passed school examinations; (iii) unfits, or bad types, to be weeded out; (iv) men who have been wounded or received honours; (v) what men belong to the same sub-class; (vi) what men come from the same locality; and (vii) what men have relations in the Army.

Specialists. These should contain names of those who have done special courses, or have previously served with H.Q. Company or Admin. Company, or are specialists with the company at company weapons. Give a copy to the H.Q. and Admin. Companies, and to the Adjutant. The list will help you to allot men to vacancies which may have to be filled from your class.

School Examinations.—Will show the educational standard of your Company; also what individuals who, through lack of opportunity, are below standard. You can then set about coaching them.

Unfit men.—This list can at first only be a cockshy; but you can make a start by collecting names from Platoon Commanders, and by glancing through your conduct sheets. The main test will be personal observation, confirmed by M.Os inspection and by actual disciplinary cases subsequent to your taking over.

Wounds, Honours, Awards.—This list will help you in your postings, and in choosing good men as instructors in training formations.

Sub-Classes, Localities, Relationships.—These lists will give you a framework for the understanding of each man's background, and also assist in sifting any problem which may have its origin in some intrigue.

Welfare. This may be classified under the following headings:—

Accounts.—Get from the Accounts Clerk a statement showing the rates of pay and allowances of each rank, after which check from the A.B. 64s (a) rates of pay, (b) family allotment, and (c) names and addresses of heirs.

Health.—Hold an M.Os inspection as soon as possible, and hold your own sick parade daily under your Pay Naik before those reporting sick go to the M.I. Room; see that all minor ailments are treated in the company, either by the Platoon Havildars or your own S.Bs. Check your Platoon Havildar's medical haversacks. The M.O. issues them and their contents.

Leave.—See that the leave roster is complete; give a copy for record and safe custody to the Adjutant's office. When a leave party is detailed, read out the names at roll call. If there are any objections or counter-claims, settle them in front of the whole company.

Petitions.—Go into these very carefully. Read the notes on submission of petitions and complaints in the Pamphlet on Family Welfare; it shows you which petitions are sanctioned. As company records may go astray or get lost, it is reassuring to the man, and also a useful precaution, to give a copy of petitions sanctions to the petitioner. If he goes on leave he can take the copy with him. If the Company changes hands, he can show it to the new Company Commander as a reminder.

Amenities.—Have your own ideas about these. Do what you can by local purchase (if the adjutant will sub-allot amenity funds), by salvage, and by improvisation, to provide and make the simple articles and materials which the men really want—stationery, cloth, literature, sports kit, lamps, cleaning materials, oil, eating utensils, etc. An unofficial Amenities Naik helps. Here are two important points to watch regarding morale: first, see that your men write letters home; secondly, should any man be killed, wounded, or injured, try and write a personal letter to the relatives.

You have now found out who your men are; you are satisfied about their welfare. Now the "Q" side remains. It may be divided into four beadings: Stores (controlled and non-controlled), Supplies, Scales, and Loading Tables.

Stores.—Find out from the Q.M. what "controlled" stores you should have; strictly speaking, there is no such thing as a Company W.E.T. But the

Q.M. will sub-allot to companies pro rata to the Battalion supply. Having found out what you should have, order an inspection and see what you actually have. Note what is deficient and useless and indent accordingly. For Company weapons arrange for an armourer's inspection.

For non-controlled stores, hold a kit inspection—personal kit and equipment, and company stores. Note what is deficient and indent accordingly. Having indented, follow it up; check receipts against indents; re-indent; badger the Q.M. about any articles not supplied. On the other hand, help him by seeing that men repair their clothing and kit; remember that you have a bootmaker, and that the battalion has a tailor, who should be at your disposal one day in seven. See that each man's number is on every article.

Supplies and Scales.—Find out the existing scales, and work out amount of rations, distribution of ammunition down to each man. Keep the scale for reference.

Loading and conversion tables.—This brings you to the question of loading tables and transport, and of conversion tables from A.T. leads to M.T. loads. The object is to enable you to calculate quickly what transport you will require to lift the company load whatever company strength may be. Get a pair of scales and weigh articles of kit, stores, ammunition. Here are some:

Basic fighting load		• •	• •	 24 ibs.
Blanket		• •		 51 lbs.
Groundsheet	• •	• •		 $3\frac{1}{2}$ lbs.
Mosquito net		• •	• •	 $1\frac{1}{2}$ lbs.
Filled magazines (six)		• •		 20 lbs.
Spare barrels (three)				 20 lbs.
Box S.A.A.				 75 lbs.
Box Sten				 50 lbs.
2" mortar bombs (48)	••		• • •	170 lbs.
Pakhal	••			80 lbs.
Picks (ten) shovels (14)	• •			160 lbs.
110110 (0011) 5110 (010) (111)				100 100.

You have now taken over the "A" and "Q" sides; now to the "G" side—training. You will be given special directives about this, but try and follow the usual sequence from individual to collective training.

- (i) W.T. Get your men on to the range, or organise field firing as soon as possible. Check any tendency to relapse into the old peacetime singsong methods of instructions, especially in fire orders. Hold bayonet practices in P.T. periods.
- (ii) For the school, begin at the very bottom. Ask yourself what it must mean to be totally illiterate, and draft your school programmes accordingly. You may think you are beginning at the beginning with teaching your R.T. class figures from 1 to 100; but are you sure they can all count aloud? And are you sure they can draw straight and circular lines? At the other end of the scale arrange classes for English for those interested.

Sport and P.T.—Make instructors follow the correct sequence of instruction. Organise section competitions. Keep a record of swimming results. The aim must be swimming a fair distance in uniform, less equipment, but with 100 rounds and rifle with fixed bayonet.

Exercises with A/T and attached Personnel.—Weekly if possible. Begin with a route march and watch march discipline. This will give you much to check; it will also give you a good opportunity to check your war equipment and its distribution on the ground.

Night Exercises.—One exercise (and one night firing) a week. Begin at the bottom, with mere inter-com. Movement at night and night ambushes are the main items.

River Crossings.—From swimming practices pass on to river crossings. You can never rehearse these enough, and they involve a good deal of forethought in the working out of Loading Tables for your boats.

Try to organise two N. C.Os. cadres—one for Section Commanders or Naiks, and one for L/Naiks and unpaid L/Naiks. You may have to cram your parades for these into two periods—one early in the morning and the other in late afternoon. Also endeavour to run a cadre for V.C.Os in R-T.

Apply to the Adjutant for any vacancies on courses. If they are few, make the most of appointments and transfers inside the Battalion. With men going on leave you will find many chances of grooming men for the next job above them. Make an umidwar L/Naik your orderly or company runner; see how he shapes, and attach him to the Battalion H.Q. as Battalion runner. As someone aptly called it, the Battalion Office is the Sepoy's Staff College. Attach your reserve specialists to H.Q. and Adm. Company for refresher work. In all these ways you can keep men from going rusty.

You have now taken over your company. You have checked your W.E. ("A"), your W.E.T. ("Q"), and you are ready to maintain and make the most of them ("G"). Your company office contains papers, if not files, on:

- "A": Posting and long rolls; discipline; petitions and applications; amenities; accounts; leave roster; M.Os Parade states; sick reports; honours and awards.
- "Q": Controlled stores; non-controlled stores; rations and ammunition; loading tables.

"G": Training Programmes.

Make out a fortnightly progress report covering the above headings, and include in it your intelligence summary, sending it to the Adjutant, with a copy to Q.

Until you know your company by heart there is no better way of getting a grip on things than by working them out on paper. And when you do know your company by heart, this is still the best way of ensuring smooth running while you are in command, and a clean handover when it is your turn to be relieved.

Lt.-General R. A. Savory

Lieut.-General R. A. Savory, C.B., D.S.O., M.C., Adjutant General in India, who is Chairman of the Executive Committee of the United Service Institution of India, has been appointed the first Colonel of the Sikh Light Infantry.

THE RIGHT TYPE AND SOME THOUGHTS ON INDIANISATION

By Major Gurbachan Singh.

GREAT Britain has recognised India's claim to national independence, whether it be a kind of self-government within the framework of the British Commonwealth of Nations, or otherwise. Self-government presupposes a capacity for self-defence and unless India is ready to shoulder the responsibility of her own defence, her independence will mean but little.

Public men in India have been declaring over a number of years that India is only too anxious to take over her own defence if the British would but let her do so. The British point of view, on the other hand, has always been that the armed forces in India cannot be "Indianised" as quickly as they wish because the right type of Indian young man is not coming forward in sufficient numbers to officer the Indian Army. They further contend that India's freedom will not be worth a day's purchase if her defence cannot be handed over to a cadre of efficient and experienced Indian officers, and that to gain experience takes time.

No one who has the good of India at heart will disagree with the latter contention, but there is a lot of disagreement over the former. Merely to say that the right type is not coming forward does not take us very far. What is the right type? Does he exist? If he does, what is there that holds him back? No one has yet described what the term "right type" means.

My task in this paper is to study, and make an attempt to determine what the "right type" is. It behoves all of us to be of one mind when we use this term, for if we are not, the present misunderstanding and therefore mistrust, is bound to continue. I will also say a few words about the "right type" of British officers who will be welcome in the new Indian Army.

Let me say at once that the "right type" does exist. Indeed, he has existed for a long time but, owing to our faulty methods of selection, we have failed to catch him in sufficient numbers. The four hundred and fifty odd Indians who form the regular Indian officer element of India's armed forces to-day, and many ICOs, are a fine body of men and they in a nutshell constitute the right type. During the recent war these men have proved that courage, determination and resourceful leadership are not the monopoly of any race. Given the training, good equipment and the opportunity to put that training to the acid test of war, Indian officers have acquitted themselves well in all types and conditions of warfare.

What are the attributes of the right type? The foremost attribute of military leadership is a sound general education, with a more than cursory acquaintance with such subjects as science, economics, geography and history. Modern war has shown that leaders must have an elastic and adaptable mind if they are not to crack up under the stress of battle. Only a sound educational background will develop these qualities.

The author of this article was an instructor at an OTS in India recently, and found that many of the cadets who came from civil life lacked qualities of leadership owing to their faulty education. Their scholarship had been purely academic and had not been designed to develop leadership. Candidates who

came from the ranks, especially those who had been on active service, possessed excellent qualities of leadership but lacked a sound educational background and as a result were very slow in the uptake.

What is wanted is a happy mean between these two extremes. A general overhaul of the entire educational system of the country is now envisaged by the authorities, and the opening of new military preparatory schools should in due course produce the right type of general education for an army career.

I would emphasise that in order to get larger numbers of candidates we must not reduce the standards of qualifications which ordinarily applied to cadets entering the I.M.A. before the war. If we do we shall never have an efficient Army.

Turning to politics, to have a politically minded army is to head for a national disaster. Politics, unfortunately, colour the tenor of all life in India to-day, but if our future Army is to carry out its normal military functions efficiently, politics should be taboo. A cadet therefore who comes from a politically active class is most undesirable in the officer ranks of the Army. I am aware that soldiers have the right to vote and are, of course, entitled to their individual political opinions as long as they do not make a public exhibition of them. A soldier's duty and loyalty is to his country and not to the party government of the day.

Next, the "right type" must have a sense of responsibility, self-discipline, character and, in short, all the qualities of leadership which are known by us all as that indefinable mysterious term "personality". A natural leader with a positive type of personality gets the best out of his men while one who tries to drive them does not get very far.

Lastly, one who looks upon a career in the Army as a money-making business only is not the right type. The youth of the country must consider service in the defence forces as a great honour because honour it is.

I have tried to outline some of the attributes which go to the making of the right type. I have not attempted to discuss the very obvious ones. If the candidate who offers himself for a commission has these attributes his characterbuilding and general military education at the proposed War Memorial Academy should fit him very adequately for a successful career in the Army.

The defence of India will be a joint Indo-British responsibilty for many a year to come. British and Indian officers have learnt to respect each other under the stress of battle and, given good-will on both sides, there is no reason why this happy relationship should not continue in the years of peace ahead. The handing and taking over of the complete defence of India will be a gradual, but not necessarily a slow, process. India would want the very best type of British officer in her Armies. Birds of passage to whom the "glamour of India" does not appeal, will be misfits during the period of transition as will be those who always "wanna go home".

As regards Indian officers the responsibility which lies on the shoulders of the selection boards cannot be stressed too much. Once the "right type" that I have attempted to define earlier has been chosen, the next stage will be the task of the new War Academy—which will probably turn out its first finished product in about 1953. The cadet, above all, must be given the opportunity to develop his initiative and powers of discussion. When a cadet has taken up a moral stand on any issue, right or wrong, let him defend it. There is no better way of making young men confident and morally strong.

The Indian Army that this cadet will eventually officer will be a well-balanced force where, unlike in the past, one arm of the Service will not predominate to the detriment of others. The Army will be as representative of the various Indian communities as possible and the decision to keep on in peacetime The Madras Regt., The Bihar Regt., and other new regiments raised during the war, is a step in the right direction. The Army will be a small but highly educated and mechanised organism, as the cost of keeping an army of our 1939—45 size would be prohibitive.

There is a widespread enthusiasm for education in the Army to-day and the jawán now takes an immense interest in the things of the mind. A very large number of Indian soldiers have been overseas and, after a long stay in countries like Egypt, Palestine, Iran and Italy, have awakened to the significance of ancient history. Their stay in countries like Malaya, Java and Borneo is bound to have prolonged effects on their outlook on things in general. The sepoys take current affairs seriously nowadays. The "line bát" is quickly giving way to rational discussions. These factors are portents which cannot be ignored and the sepoy of tomorrow would look to his officer to interpret them to him.

The reputation of the Indian Army stands higher to-day than it ever did before. Indian soldiers have shown their prowess in battle, being proved second to none. It has taken many years of hard work and human understanding, coupled with good man-management, to bring the Indian Army to this pitch and there is a deep bond between leader and led. This achievement has been mainly British. To take over this bond unimpaired, India will need the highest quality of military leadership and character but already a good, if small, start has been made. The finest troops cannot avail without good leadership.

New Pay Code for British Personnel in India.

In the White Papers announcing the post-war emoluments of members of the British Armed Forces it was stated that the arrangements to be made in regard to British Service Officers and Other Ranks remunerated under the Indian Pay Code were being examined.

Both H. M's Government and the Government of India have now reached the conclusion that it is undesirable to maintain a separate code for members of the British Services serving in India or elsewhere, and they have, therefore, decided that from July 1, 1946, the new Code, as announced in the White Papers referred to above, and also the UK Income Tax Code, should apply both in India and the Far East. The change will enable members of the United Kingdom Forces to be remunerated on a common basis wherever they may be serving, and will greatly facilitate the administration of pay and allowances.

In conformity with the practice under the British Pay Code in certain other localities overseas, a tax free allowance will be introduced to cover extra costs arising from local circumstances. This allowance will be called Local Overseas Allowance, and the rates will vary according to whether the recipient is married or single.

The statements in the White Papers regarding the termination of war gratuity, postwar credits and war service increments apply equally to the British Services in India and the Far East as elsewhere. As regards Japanese Campaign Pay, this will continue up to the Anniversary of $V_{\bullet}J$. Day—August 15, 1946— when it will cease.

In order to avoid hardship which might be caused by a sudden and serious loss of higher rates and the incidence of heavier taxation, arrangements will be made for the grant of war excesses and transitional allowances broadly on the lines of those provided in the White Papers, with certain modifications designed to meet the special features of the Indian Pay Code.

INDIAN GUNNERS' HONOUR

By "MATROSS"

THE grant of the title "Royal" to the Indian Regiment of Artillery will give great satisfaction not only to the Indian Army as a whole, but also to all Gunners. For though the Indian Regiment of Artillery only came into being in 1935, the Indian Gunner has a far longer record of devoted service.

The early history of Indian artillerymen in the British Service is obscure, but for many years it was the accepted policy not to enlist any Indian for duty with the guns. On June 17, 1748 the Court of Directors of the East India Company laid down that "no Indian, or person of mixed breed or Roman Catholic of what nation soever, should be admitted into a laboratory or military magazine," and this order was later extended, so as to prohibit the employment of Indian gunners. Indians were, however, enlisted as Gun Lascars, their duties being confined to moving the guns in action by means of drag ropes and to the carrying of ammunition.

The prejudice against Indian artillerymen succumbed at last to stern necessity, for in August 1777 the acute shortage of European gunners led to the raising of the first company of Golandaz for service with the Oudh Brigade. This experiment was made at the suggestion of Colonel Pearse, Commandant of the Bengal Artillery, which was then a purely European Corps.

The new unit under Lieut. Robert Bruce accompanied General Goddard's force from Bengal to Bandelkund and Bombay in 1778, and so satisfactory was its behaviour that two additional companies of Golandaz were raised in Bengal. It was then decided to group the three companies together under Major P. Duff with an Adjutant and a Quartermaster, and a Captain Lieutenant to command each company.

In 1778 a re-organisation of the Bengal Artillery took place and the Golandaz were augmented to three battalions of eight companies each. These Battalions were raised at Calcutta, Cawnpore and Fatehgarh and the 2nd and 3rd Oudh Companies were incorporated in them. The gun lascars were at the same time reduced.

One immediate effect of the introduction of this new organisation was the withdrawal of battalion guns from infantry regiments; the guns were handed over to the Golandaz. Actually, this reform was a wise one, since guns could be handled far more effectively in action when grouped in units under artillery officers than when allotted in pairs to each infantry battalion. Moreover, the gunners could be better trained and administered by their own officers working in companies than they were when scattered throughout the army in small detachments, usually under N. C. Os.

But infantry officers resented the loss of their battalion guns—and perhaps also the resulting loss of certain perquisites connected with their upkeep. The result was an agitation against the new policy of employing Indians on artillery duties, and on November 23, 1779, an order was issued for the disbandment of all Golandaz, despite the vigorous protests of Colonel Pearse. This order was

duly carried out, and most of the discharged Indian gunners, disdaining to enlist as gun lascars, joined the Mahratta service. The guns were again handed back to infantry battalions, where they were usually served by only partially-trained sepoys without expert supervision.

To replace the three disbanded Golandaz battalions, the East India Company had recourse to re-enlisting gun lascars, who were required "to perform all the duties of ordnance with the exception of pointing and loading guns and mortars." But gun lascars were not trained artillerymen, and when the shortage of European gunners again became acute in 1782, three companies of Golandaz were hastily raised at Fort William, Chunar and Dinapore. By 1785 all three had been reduced, despite the strong recommendation of the Governor-General that at least two of them should be retained on the establishment as some recognition for their excellent service.

It soon became apparent that the European gunners assisted only by Gun Lascars could not undertake the increasing responsibilities of the artillery arm, and in 1798 another experiment was tried which was in the nature of a truly British compromise. Instead of raising new units of Indian gunners, it was decided to add an Indian Officer and 46 Indian N. C. Os. and men to each European Company of Artillery, the idea being that each gun detachment would include men of both races. The system was universally unpopular from the start.

The Golandaz, who were collectively described as "The Component Part," disliked working beside men of different race, language, customs and religion. The British gunners distrusted the Indians' reliability in drill, and this in the days of muzzle loading guns was a serious matter, for carelessness in handling black powder charges usually resulted in death or mutilation for members of the gun detachment. So strong was the protest from both British and Indian gunners that in 1802 the obnoxious "Component Part" system was abolished. The Indian gunners were withdrawn from the European companies and were eventually formed into a separate unit of five Golandaz companies.

The new establishment of Golandaz was not officially authorised till 1806, and to raise the companies it was necessary to enlist many Indians who had fought the Mahratta guns so staunchly against Lake. But the organisation of separate Indian units was a sensible one, and the establishment was increased to seven Companies in 1809, to ten Companies in 1812 and to fifteen Companies in 1818. Five more companies were raised in 1824 and in 1827 the "Native Artillery" was reorganised into two Battalions, each of eight Companies. By 1845 the Golandaz of the Bengal Artillery consisted of three Battalions, each of eight Companies.

Meanwhile in Madras a very similar struggle had taken place to employ Golandaz in the face of the deep-rooted prejudice against allowing Indians to learn the mysteries of the Gunner's art. A "Native Artillery" Battalion of ten companies was raised in 1784, but in the following year it was disbanded together with its attendant Gun Lascar establishment. To replace these ten companies, a system of mixed units was tried, very similar in conception to the unpopular "Component Part" scheme in Bengal. In Madras the Indians attached to each European Company were called "Assistant Native Gunners," but as each company received 3 Indian Officers, 12 N.C.Os. and 200 men, it is probable that their duties were chiefly those previously undertaken by Gun Lascars rather than trained artillerymen.

Apparently this mixed system was no more satisfactory in Madras than it subsequently was in Bengal, for in April 1786 the corps of Native Assistant Gunners was broken up and the men were drafted into Sepoy battalions or into the Gun Lascar establishment. At the same time it was clearly laid down as the "express orders" of the Honourable Court of Directors that "none of the natives from the interior country of Hindustan shall henceforth be taught the exercise of artillery."

By March 1799 the scruples of the Honourable Court of Directors regarding Indian gunners were overcome to the extent of raising a single Golandaz Company for service at Madras, but this unit was disbanded in March 1802. Three years later however a Troop of Native Horse Artillery was raised and a second Troop was added in 1819. By that year there were also ten Golandaz Artillery Companies which were formed into a separate Battalion.

In Bombay the first "Native Artillery" units were raised in 1826 when five companies were formed. Three more companies followed in 1827, two more in 1843 and another two in 1846.

The Golandaz earned an excellent reputation for skill and steadiness in the Mahratta War of 1817, in Burma, Afghanistan, Gwalior 1843, the Sikh Wars, Persia, Arabia, Sind and Aden. The 3rd Bombay Golandaz Company bore the distinction "Hyderabad" on its appointments for its services in the Sind Campaign, while the 2nd Company 6 Battalion Bengal Artillery, was granted the unique official honour of having a mural crown engraved on its guns in memory of its gallantry in the defence of Jelalabad.

During the outbreak of 1857, only ten Golandaz regular units of the existing 42 were involved in mutiny, and in no single case was any violence offered to the officers. In most cases, companies mutinied only under pressure from their comrades of the infantry and cavalry, and several Golandaz units performed active duty in suppressing the outbreak.

When, after the Mutiny, the East India Company's Artillery was absorbed with the Royal Artillery, the Golandaz companies were reduced except for two Bombay units which later became 5 Bombay and 6 Jacob's Mountain Batteries. They, with the four Punjab Frontier Force batteries, remained and were later joined by other Indian Mountain Batteries, but none of these units was incorporated with the Royal Artillery till 1927.

So after 150 years, the old prejudice against the Indian artilleryman has been gradually dispelled, until to-day his final justification comes with the grant of the title "Royal" to the Indian Regiment of Artillery.

OFFICER PRODUCTION AND NATIONALISATION

BY MAJOR A. J. WILSON, M.C.

NATIONALISATION of the Indian Army over a period of years has for long been accepted as part of the Government plan for transferring political power in India from British to Indian hands. The Government of India, in agreement with the British Government, has decided that permanent commissions in the Royal Indian Navy and the Indian Army will in future be restricted to Indians and others domiciled in India who are subjects of HisMajesty or of a Prince or Chief in India. It has been recognised that the three Indian Services will still require a quota of British Officers until there is an adequate supply of qualified Indian officers.

This decision, made public on October 22, 1945, was further implemented on February 25, 1946 by the re-opening of the Indian Military Academy, which will train Indians for regular Army commissions until it is absorbed into the new Indian War Memorial Academy. The ultimate cadet capacity of the present Academy will be in the neighbourhood of a thousand, providing (on the basis of a two-year course) for approximately 400 officers to be commissioned annually.

The policy and the means of implementing it are clear. One obstacle only stands in the way of its attainment—a barrier which cannot be sidetracked or removed by anybody but Indians themselves. The failure of young Indians of the right type to volunteer their services for training as officers is a fundamental barrier to completing nationalisation of the Indian Army; it is also likely to prove a serious handicap to the political development of the country.

The transfer of power to Indian hands, if it is to be based on fact and not on fiction, cannot take place except on the firm foundation of military security, which in turn can only rest upon strong, united and Indian-officered defence forces. Only with freedom from outside interference and her status as a "land island" thus secured can India face the problem of solving her pressing political difficulties and of developing her economy, so that she can ultimately assume her place among the great Powers of the world, now open to her by reason of her strategic position and largely undeveloped economic and industrial resources.

Why is there this failure on the part of young Indians to come forward for training? Perhaps the most important reason is to be found in the failure of the average educated Indian—including the political leaders,—to understand, fully the military implications of Indian independence. It is natural, and derives from the fact that Britain has, since living memory, been the authority primarily and ultimately responsible for the defence of India, which has been able to develop without fear of outside interference, secure in the knowledge that her long and vulnerable coast-line was defended in the last resort by the Royal Navy, while a combination of the British Army and largely British officered Indian Army assured the defence of her land frontiers.

The full implications of this responsibility for her own defence are seemingly only now being realised by India's political leaders, and will take considerably longer to become apparent to the class of educated Indian from which officers of the future Indian Army will largely be drawn.

Many Indians fail to realise that the decision to change the British-Indian Army into a national Indian Army is now an established military policy. This failure may be attributed to many causes—distrust (even perhaps at this stage) of British intentions, criticism by some Indians of the Indian Army as a "mercenary force," and the memory by some Indians of the stupid, prejudiced and shortsighted 'attitude towards nationalisation current in some quarters of the Army in the early stages of its introduction. Closely linked with these factors is a reluctance on the part of India's political leaders to call forward the best of India's young men to play their part in making the Indian Army a truly national force.

Uncertainty of the political future of the country and its effects on the Services is a further reason for the general disinclination of young Indians of the right type and background to offer themselves, for training as officers. Many are apprehensive of the attitude a Central Administration may take towards the Army in the future in the matter of status and pay. This impression, however ill-founded in fact, is nonetheless current and potent in India, and is having a considerable effect in discouraging young men with ability and prospects in other fields from embracing the Army as a career.

Nor should the purely economic aspect be overlooked. Openings of all kinds exist, and there are large sums of money to be made at present in civilian life in India, while the pay of Army officers, though by no means ungenerous, is not at the same time such as is likely to tempt the young man who is largely actuated in his choice of a career by financial considerations.

To all these reasons one must add the absence of enlightened patriotism and a sense of duty in the minds of many young Indians. This is due largely to avoidable defects in the educational system of the country, with its undue emphasis on the attaining of arbitrary and abstract standards of knowledge coupled with the lack of provision for training in citizenship. The Indian Universities, for example, tend to turn out selfish and undisciplined products who are unlikely even to feel any sense of responsibility for the defence of their country, far less and inclination to take a part in the task themselves.

The concept of service for its own sake is as yet a wholly alien one to the majority of young Indians, and in all too little education in India is the close relationship of position with responsibility adequately stressed. Full and adequate numbers of public servants in all departments of the State cannot be expected in India until this gap in the educational system of the country is more completely filled.

What remedies are there for the present serious state of affairs, other than tacit acceptance of an unsatisfactory position? First and foremost a solution of the communal problem would go far towards resolving the doubts at present held by many young Indians, who would otherwise submit their names for training as officers. Secondly, further attempts must be made to explain to the Indian public that the responsibility for the defence of India will shortly be theirs. A strong national Indian Army will be required, and if the leadership of this Army is to reach the standard deserved and expected by the magnificent fighting men who will form its rank and file, only the best of India's youth will be acceptable for training as officers.

It would be a breach of faith with the past, as well as to store up trouble for the future, if any but the very high standard of the present Indian Army were

to be accepted, for undisciplined, inefficient and indifferent Armies bring discredit as well as disaster to the country for whose security they are in so large measure responsible. It must, therefore, be the object of everybody, British and Indian, connected with the defence of India, however humble their position, to lose no opportunity of stressing that responsibility for India's defence will shortly become absolute, and that it is in the hands of Indians themselves to determine the quality of their defenders.

For the lack of education in citizenship and its responsibilities it is difficult to suggest any short term and immediate policy. So far as the Army itself is concerned, this remedy lies in the teaching of leadership and citizenship in all its forms at the Indian Military Academy, and at the future War Memorial Academy. Only by making the most strenuous efforts in this direction will it be possible to develop a cadre of officers actuated by patriotism and a sense of duty and not by the desire for power of personal effort. It is to be hoped that other educational establishments in India will follow the lead of the Army.

Closely allied to training in the responsibilities of a citizen lies the relationship of the Army officer to politics. The young Indian is both by up-bringing and inclination a political being—and in the present nature of things it is both healthy and desirable that he should be so inclined. It is, however, difficult yet vital to persuade him that a soldier must, in his public life at least, be utterly detached from and uninfluenced by political considerations. His task is to serve the Government of the day without reference to its political complexion or his own opinions. Insofar as this remoteness from politics is an essential quality of all public servants, the Army has here again an opportunity to give a valuable lead to the rest of India.

To summarise, the transfer of power from British to Indian hands cannot take place except on the firm foundation of Indian security. This security is in turn based on a strong united Indian Army, officered by a cadre of Indian officers worthy in all respects of the magnificent material in the ranks it will be their privilege to lead.

Every effort must therefore be made to persuade young Indians of the right type to play their part as leaders in maintaining this security, so that India can develop either as a member of the British Commonwealth or as an independent sovereign state without fear of molestation.

Officers Required by Indian Artillery.

Following the recent announcement concerning the expansion of the Royal Indian Artillery, officers in other arms of the Indian Army have been called upon to volunteer for permanent transfer to this branch of the service. An India Army Order, inviting applications for transfer, is under issue.

Only British and Indian officers holding regular commissions in any arm of the Indian Army and I.E.C.Os. under 35 years of age who have volunteered deferment of release in either of the categories D.V.R. D.V. and D.V.2. should apply for transfer.

Officers selected will attend a four-month conversion course at Deolali and final acceptance will depend upon their reports during this training. While under instruction officers will retain their temporary rank and after training will, as far as possible, be posted to regimental appointments in that rank.

FRONTIER HOCUS-POCUS

BY LIEUT.-COLONEL W. J. M. SPAIGHT.

LAST year I wrote a short article on the N.-W. Frontier, and sent it to the U.S.I. of I the under a nom de plume. The Editor, however, said that he would prefer to publish it under my own name and I agreed.* It appeared in the July 1945 edition of the Journal, and was called "The Frontier Myth". In the article I said that it was a myth that the Frontier was a good training ground for modern war. Two articles have since appeared in the Journal, disagreeing with my point of view. One was in the January 1946 edition, called "Frontier Realities" by Brigadier M. R. ROBERTS, D.S.O. and one in the July 1946 edition called "Further Thoughts on Frontier Myths" by "The ADMIRAL".

The lack of anonymity, when answering senior officers, rather restrains my reply. I have the three articles before me as I write, and I have decided that I was writing about different conditions to those discussed in both Brigadier ROBERTS'S and "The ADMIRAL'S" articles.

In my article I stated that "The following points apply in particular to Waziristan during wartime, and not to actual punitive columns". Brigadier Roberts writes of "fighting" Pathans and, at one place in his article, states "errors.....are usually brought home to one very quickly with unpleasant circumstances". The "Admiral" writes of "In, say, Razcol in 1933, every officer was an efficiency expert" and also mentions Tocol in 1937 (when there were operations in progress), as an ideal of co-operation between arms of the service.

Since 1937 the Bannu-Razmak road has had to be opened by regular troops, and this has taken up so much time that it is the most pressing duty for many battalions in Waziristan. I cannot understand why "The Admiral" thinks that this stretches only from Razmak to the Narai—a distance of some seven miles—and which is the sector with by far the most men and weapons to cover it; with large reserves at hand in Razmak. The Gardai Brigade has such a large proportion of its strength tied down in permanent camp and route pickets, from Tal Bridge to No. 76 Picket at Razani camp site, that unless relieved by other troops, it can hardly do anything else but open the road.

Since 1942 almost all troops in Waziristan have been war-raised. During wartime troops on the Frontier have normally, and rightly, received low priority in all matters—including the quality of recruits and the numbers and type of weapons. Until very recently frontier units have been starved of regular officers. Transport, both M/T and A/T, has been restricted. Many new units had "HAD IT" when they went to the frontier—for they never got to the war.

Under wartime conditions the policy has been to avoid incidents at all costs. As an example; in December 1940 there was an unfortunate, and expensive, action on Pakkalita Sar, which is some 4,000 yards South of Razmak

^{*}Our letter asked the author if he wanted the article published under his own name or a pseudonym, adding that we should prefer the former. It is but fair to add that if any contributor wishes to write under a pseudonym, it does not jeopardise acceptance in any way; every article is judged strictly on its merits. It does, however, add to the reader-interest of an article if it is published under the author's name. Our attention has just been drawn to an unfortunate printer's error, which we regret, in wrongly printing the author's initials in the July, 1945 issue of the Journal. They are as shown at the head of this article,

camp, and just to the north of the Tauda China camp site. Since the return of that column Razcol has not visited Tauda China, nor have troops gone more than some 2,000 yards South of the Razmak camp wire. Razcol training columns have moved on the Bannu road, rarely further than Dosalli. Brigade and battalion schemes have been confined to the immediate vicinity of camps.

The policy has paid; since the Datta Khel Column of 1942, there has been no show on the frontier. But the new troops and the new officers have most certainly made mistakes, and have usually got away with it. The Razmak-Bannu road is opened some one hundred times a year. On every road-open day elements of ten infantry battalions and numerous ancillery troops are employed. On every such day there are, it is safe to say, several tactical errors on, at least, a platoon basis and numerous individual errors, such as failure to make correct use of cover. Yet casualties to road protection troops are negligible, and many of these are caused by long-range sniping. Razcol, on its practice columns, has not suffered a casualty since 1944 and, I understand that Tocol (The Bannu Brigade columns) has not suffered a casualty for an even longer period.

"The Admiral" speaks of Razcol in 1933 in a most flattering, and nostalgic manner and, while I agree that it was more fun then than now, I don't think that we were really as good as he suggests. In 1933 we certainly covered more ground, it was a time of quiet on the frontier and the practice was to post section, rather than platoon, pickets. Still, I do not think that any battalions came up to "The Admiral's" standard of "Any properly run battalion on the L of C gets exercise equivalent to about four 25 mile route marches per week". I can remember Razcol moving from Degan in the Tochi to Gardai, a distance of some 20 miles, in one day in February or March 1933. On that day the company that I was commanding picketted about six miles of the route from the Lawargi down to Gardai. It was glorious, but it was not exactly war, and we could not have done it if there had been any hostiles about. In 1942, against very slight opposition, the battalion of which I was 2nd in command covered less than half the route that my company had held in 1933.

As regards "The Admiral's" teams; I seem to remember that the 26 November 1936 Tocol action, which caused a flare-up that lasted for years, was, to a large extent, brought on because there was no artillery at all with the column.

Both Brigadier Roberts and "The Admiral" chastise me in the names of all the Indian formations that have won fame in this war. I do not think that many troops went direct from any frontier station into actual operations. In early 1942 some went to Rangoon, in time to participate in the Burma retreat. Otherwise I am of the belief that regular, or war-raised, Indian Army units, from Frontier stations, that went to Malaya, Burma, Egypt or Italy all spent some months training for their special theatre before going into action. I presume that there is hardly a unit of the Indian Army that had not spent some time, on some part of the frontier, in some period of its history. I do not think it fair to give the Pathan the credit for all the hard training that Indian units did before going into battle in this war.

I also think "The Admiral" unwise in scourging "Auspex" in the name of the Commander, Eighth Indian Division.

Perhaps my original article may have exaggerated some of its points, but I believe that it is, in general, correct. The longer one gets away from the frontier the nicer it seems. I know that, round my birthplace, thirty years ago the grass was greener, the fields larger and the sun brighter than they are these days.

TRAINING ARMY INSPECTORS

BY MAJOR J.P.H. DONOVAN.

**INSPECTION" has a limited significance to the layman. Being a specialised branch, it is seldom that any of the Services have access to any of its departments. The Defence Services have in the past only been concerned with the receipt of stores, but a knowledge of how those stores are made and inspected would certainly help to increase the efficiency of the Navy, Army and Air Force. For this reason a basic knowledge of "Inspection" in the training of the post-war Defence Services will assist materially in better maintenance and preservation of stores within units and formations.

During the late War the Services Inspection organization grew to alarming proportions. It started with a nucleus of technically trained men who, together with a small administrative body, were responsible for organising the inspection of all Army, Naval and Air Force equipment before it was issued. To obtain additional qualified officers in India, and also assistants for laboratory tests, was not easy. Apart from testing and reporting on samples, however, these officers and assistants endeavoured to standardise inspection by frequent tours of Inspection Depots, where bulk inspection of stores received direct from contractors' premises is carried out.

It is clear, therefore, that if in the future we are to maintain standard equipment throughout the United Nations, which is now the intention, the first thing to consider is how we are to obtain suitably qualified officers and men to advise on and report on future equipment. The Services must, in any case, develop a scientific staff of its own of the highest order of attainments, and the problem, as I see it, is: How is that staff to be trained? Training courses should, I feel, be established and divided into four levels of training: Basic, Job, Technical and Advanced. These I propose to discuss purely from a military point of view.

Trainees, starting with the Basic course, would undergo the next senior course according to their merit and aptitude. To co-ordinate responsibility for designating persons to be trained it would be necessary to divide the particular country concerned with Inspection in zones. Each zone or area would be responsible for selecting persons for training; the training policy would be laid down by G.H.Q.

The basic training would include instruction on subjects which would give a substantial background to the Inspector and impart to him an understanding of Army organization and procedure, reports and forms, channels of command and communications, civil service rules and regulations (Pay, Promotion and Leave) travel orders, allowances, duties and responsibilities of inspection, contract terminology, specifications, drawings and general information about instruments and tools of inspection and their care and maintenance.

It would be arranged for new employees, to prepare them for initial responsibilities; for those already in the service the course would be planned to improve their efficiency or to guide them into specialised commodity items or a

variety of types of inspection; while for those in the latter category who showed merit, advanced training could be arranged to teach them to assume supervisor responsibilities.

For the second type of course, which we might call the "Job" course—the training curriculum should be designed by each zone of Area H.Q. with the object of assisting Inspectors to improve themselves in the execution of their duties. Those in the "Examiner" group would find this second phase of training of great value; his work is of a repetitive character, such as examinations for visual defects, checking measurements by special gauges, etc. The fact that his work is simply explained means that this particular course could be made available for students with little difficulty.

Inspectors have hitherto been military and civilian officers, but if we are to develop our own scientific staff in the Army in future they will have to be military. They will have to be carefully selected, possess the requisite technical knowledge, be aware of the raw materials employed in manufacturing various types of equipment, and of the standard of those raw materials. An accurate knowledge of administrative responsibilities must also be within their sphere. Their work is of a semi-professional character, and the training for it is necessarily continuous and of a broad scope, and different from the relatively elementary training that is adequate for Examiners.

The last group to be considered—the Advanced—is the Administrative and Supervisory group. They must be able to direct and control inspection methods and analyse inspection operations. Roving or Field Inspectors, working on their own, would fall in this category, since they must exercise independent judgment.

So far as schedules, conditions and resources permit, all supervisory Inspectors should take the whole course, with periodic refreshers. Those considered suitable for promotion should be sent to the requisite training course.

Regular visits to laboratories should be made by Inspection personnel to keep them well-informed on latest developments and scientific procedures by which accurate measures of quality are obtained through objective tests. By visits to Inspection Depots they can make themselves acquainted with methods of packaging, packing, marking and shipping. Laboratory facilities of Government agencies as well as those of colleges, technical schools and other centres of learning should also be made use of to provide demonstrations of processes and procedures related to the work of inspection personnel.

When a newly-developed item of equipment is contemplated for production, arrangements should be made for a preliminary training of certain key personnel who are to be eventually assigned inspection tasks related to the item, at the laboratory or plant where final development is in progress. Observance of this policy should be directed towards assuring that all Inspectors to be assigned to the new item when it goes into production will have been systematically trained for their inspection job at the time the first production in the contractor's plant is scheduled.

I have not gone into detail as to the curriculum to be employed on the training courses. Naturally, it will range from elementary knowledge of rules and regulations to the servicing of contracts and standard practices in loading and shipping. But it will aim at providing the Defence Services with a body of men thoroughly trained in the proper inspecting of arms and equipment.

There is however one aspect of training I should like to stress, and that is advanced Training. Courses should be provided to afford to commodity chief Inspectors and other selected supervisory inspectors such information as will be essential for proper supervision and direction of Inspectors, and for the administration of inspection in its relationship with the contractor's organizations.

Advanced training courses should include instruction in leadership exercised by supervisions, in the improvement of morale, in the critical analysis of contractor's manufacturing, assembly, and inspection methods; in standard practices in packaging, marking, loading and shipping; in Government shipping documents and reports required of supervisory inspectors; in the basic principles of quality control; in testing procedures to determine the accuracy of inspection equipment; and in those duties essential to proper scheduling of inspection jobs and assignment of inspection personnel by higher authority.

That leads to my final point. Hitherto the Ministry of Supply has been responsible for all Service stores. Should it continue to do so? Should not the Services resume control of the production of such things as A.F.Vs. and aircraft. as well as guns? Why should not all necessary plants be handed over to the Services, together with the technical staffs, making the Ministry of Supply solely responsible for civil demands? These are matters of high policy, but nevertheless I suggest they are matters that might well be seriously considered.

Our combined Forces to-day are so closely linked together that speedy and accurate standardisation of all our methods, both tactically and strategically, should for the future be our chief aim, and "standardisation" must be the foundation of the training of Army Inspectors.

Technical Revolutions in Aviation.

Not everyone fully realises that the end of the war found us just over the threshold of a vast new technical revolution in the field of aviation. Technicians tell us there have been three great revolutions in the short history of aviation: first between 1914 and 1918, when there emerged the first breed or species of practical aircraft—the old classic biplane types; second there appeared a new breed of aircraft about 1931, the high performance piston-engined monoplane; the Spitfire was one of the first of those and that was the type with which the R.A.F. fought the war.

Now, in 1946, we are beginning on a third revolution, which is affecting combat aircraft, transport aircraft and civil aircraft alike. It is based on a new method of propulsion. The gas turbine engine is the key to the situation; whether we harness it to a propeller, temporarily, or more permanently where it issues direct in a jet, it is fundamentally a new engine.

Gas engine turbines are setting problems of a new range of speeds. At 760 miles an hour the speed of sound is attained at ground level, while at 30,000 feet the speed of sound, which varies with the temperature, is only 660 miles an hour. These speeds are being approached.

At the speed of sound, we are told, a strange wall arises and there is very stiff air resistance. It is a formidable task to break through that barrier, but once through it, technicians tell us possibilities arise of quite phenomenal speeds. These possibilities are certain in the not distant future to become an actuality.—Mr. A. Strachey, M.P., Under Secretary of State for Air, addressing the House of Commons.

RECENT ADDITIONS TO THE LIBRARY

HIS many friends in India will revel in Field Marshal Lord Birdwood's "IN MY LIFE" (Skeffington). It is a book full of good stories, the vast majority of which have their setting in India, where the author has spent nearly fifty years of his life. We cannot refrain from quoting one story. It concerns "Bill" Beresford—"a wonderful character, who for years occupied a unique position in India, for he seemed to know everyone." He was Military Secretary to Lord Dufferin and his successor, Lord Lansdowne.

"Bill was a very kind-hearted man, and always ready to help anyone who might be down. On one occasion at a levee, when it was his duty to call the names of all who passed the Viceroy, every man, of course, presented his card. One unfortunate man who appeared without a card whispered: 'Of course, you know me well'—but he was horrified to find himself announced as 'Gentleman without a card' and bowing to His Excellency in that character".

"The Soviet President Speaks" (Hutchinson.) This selection of speeches delivered during the war by M. I. Kalinin gives a vivid picture of wartime Russia. M. Kalinin, who for twenty-seven years has been head of the supreme organ of Soviet power, was born in 1875, was one of the most active leaders of the armed insurrection in the days of the Great October Socialist revolution.

The contents of the book range from addresses and appeals to various sections of the Home front to concise reviews of the military situation, forth-right surveys of international affairs, and an address on "Slavs and the War". It provides a great deal of information about the Soviet War effort and its relation to the whole history of the U.S.S.R. as a State of a new type—notably in a long article, "The History of the Soviet State", which is a most useful summary in itself.

Two other books for those interested in Russia are From Moscow to The Russian Frontier, by Evgeny Krieger (Hutchinson), and Studies in Russian History, by Nicholas Ruskin, (United Publications, Delhi). The author of the former book was one of the best-known Soviet war correspondents; he was present at the battles of Moscow and Stalingrad, accompanied the vast offensive which swept forward, liberating the Ukraine and White Russia; and witnessed the recapture of Sevastopol and Odessa. This book, which is a selection from his dispatches, provides a graphic scenario of the whole course of the war on the Eastern front.

The latter volume contains six historical studies which provide a reliable background against which those interested in Russia can view the widespread but still uncrystallized ideological changes of modern times. They stop short of the Revolution, and even of what is sometimes called the Revolutionary Period, for except as regards Russian Turkestan, they do not go beyond the Emancipation of the Serfs in 1861.

EIGHTH ARMY—EL ALAMEIN TO THE RIVER SANGRO. By Field Marshal Sir Bernard L. Montgomery. Formed in September, 1941 by our own Commander-in-Chief, Field Marshal Sir Claude Auchinleck, the Eighth Army was a very happy family. Later, under the command of Field Marshal Montgomery, it went from Alamein to half-way up Italy without losing a battle or even a serious action, and without ever withdrawing a yard.

This volume, excellently produced and printed in Germany by the Printing and Stationery Services of the B.A.O.R. and containing several maps, will be read by all who served in the Eighth Army and by all students of military strategy with great interest. It covers the period from August 13, 1942 to December 31, 1943 and is based on Field Marshal Montgomery's personal diary.

Another book concerning the North African Campaign is Tobruk, by Chester Wilmot. The author was a member of the Australian Broadcasting Commissions' Field Unit in the Middle East, and in this book he tells the story of what took place in and around Tobruk in 1942. He has been able to include in his story much data from enemy sources and quotations from the diaries of German officers.

B. B. C. WAR REPORT, June 6, 1944 to May 5, 1945.—(Oxford University Press.) These dispatches by the B.B.Cs. War Correspondents give an interesting and vivid account of the progress of the campaign in North-Western Europe from Normandy to the Baltic. "War Report" was first broadcast in the B.B.Cs. Home Service after the 9 o'clock news on D Day, June 6, 1944. In the months that followed it was listened to daily by an audience of from ten to fifteen million listeners in the British Isles and by millions across the Channel, and the B.B.C. has done well to publish in one volume some of the finest eye witness descriptive accounts of the road to victory which we have read.

It shows what astonishing strides were made by radio reporting during the war, for many people will recall the public controversy which arose during the Battle of Britain in 1940 by a recording made at Dover by Charles Gardner. At that time many people felt that an eye-witness description of a dogfight overhead between R.A.F. fighters and the Luftwaffe was not a proper thing to broadcast. The contention was that an incident in which men were losing their lives was being treated as if it were a cricket match or a horse race. The misgivings were sincere, but the pressure and nearness of the war and its life and death meaning to everyone brought about an overwhelming change of attitude, for millions later listened to the broadcasts of D Day, and Arnhem, and the crossing of the Rhine.

Whether the reader heard the broadcasts or not, he will find it of absorbing interest.

THE QUEST OF LEADERSHIP, by Donald Portway (Thacker). The author of this valuable book needs no introduction to members of the U.S.I. of India, for he has contributed two or three most interesting and useful articles on this subject in past issues of the Journal. Leadership comes but to the fewnot only to those very few who are born for it, but also to those who work to deserve it. Since none but the self-conceited may say with confidence that one has innate in one the qualities of leadership, the only way open to the majority of those who would lead their fellow-men is to work patiently to achieve leadership. For leadership is a matter of vital concern not less to those who aspire to lead than to those that are content to be led. Colonel Portway has devoted a lifetime to the training of youth, and his experience as President of the Board for Officer Selection in the Bombay and Central Provinces give him valuable knowledge on this subject of leadership in its relation to India. The book is most readable, and can be confidently recommended to all interested in this vital subject.

JUNGLE, JUNGLE, LITTLE CHINDIT, by Major Patrick Boyle and Major Jon Musgrave-Wood, (Hollis and Carter). As Major-General Lentaigne says in his foreword, "in both World Wars the German General Staff has been perplexed by the British sense of humour, which has always been strongest in

adversity." The fighting in Burma put as great a strain on the British soldier as any other campaign in World War II, but it did not defeat his ability to crack a joke when things looked bad—as any reader of this book will discover. The volume contains many drawings and cartoons, and those, combined with the text matter, are guaranteed to raise a laugh, whether the reader has served in Burma or not.

THE REVOLUTION IN WARFARE, by Captain B. H. Liddell Hart (Faber and Faber). This book deals with the history of modern warfare and its tenden-It is divided into two parts. In the first the author describes the development of modern warfare in terms of the tools of war, from the growth of firepower in the Napoleonic wars to the evolution of the tank. In the second part he deals with the purposes of modern war, reviewing the history of warfare from the Middle Ages and the various restrictions upon warfare acknowledged in feudal times. "Unlimited warfare" established itself with the wars of the French Revolution; another landmark was the American Civil War, which the author considers to have been in many ways the prototype of the modern "total war". He shows how these tendencies became accepted in military theory by the general misinterpretation of the work of Clausewitz, and were reinforced both by mechanical invention and political and social causes. "Total War", he says, is not only bad in itself, because of its destructiveness, but is bad because it produces the wrong kind of peace. It is "the combination of an unlimited aim with an unlimited method".

FLAT-Top, by F. D Ommanney (Longmans, Green) is the story of a trip on an escort carrier to Russia. During the voyage one enemy aircraft and four U-boats were sunk, and as a result a convoy of fifty ships, heavily loaded with war supplies for Russia, was brought into port with the loss of only two in the teeth of persistent "Wolf-pack" attacks lasting over a week.

THE BALTIC NATIONS, by F. W. Pick (Boreas Publishing Company) gives

in compact form a historical survey of Estonia, Latvia, and Lithuania.

Indian Studies (United Publications, Delhi) give a picture of various aspects of Indian life, and is particularly interesting to the newcomer to India—and more so, perhaps, to many people in the United Kingdom to whom some facts about the country would be extremely useful.

GOVERNMENT CONTROL IN WAR, by Lord Hankey (Cambridge University Press) is a synopsis of the development of Government Control, and seeks to establish some basic principles and to draw from the past some lessons for the

future.

FRESHWATER GATES, by Colonel Evelyn Prinsep, is a collection of the author's writings in prose and verse over many years, and will be read with much interest by his wide circle of friends in India and elsewhere.

LORD MACAULAY'S LEGISLATIVE MINUTES, By C. H. Dharker (Oxford University Press). The majority of Lord Macaulay's Minutes, written when he was Law Member of the India Council, have never before been published. This selection of thirty-five minutes is now made public by permission of the Legislative Department of the Government of India. Apart from their literary merit, they add to our knowledge and appreciation of Macaulay himself, as Mr. Dharker points out in his critical and historical introductory chapters. They also form a valuable contribution to the administrative history of India, besides throwing light on the development of Indian political thought.

Indian Emigration to America, by S. Chandrasekhar, and Transition in India from War to Peace, by Gyan Chand, are two informative pamphlets

published by the Indian Council of World Affairs, New Delhi.

LETTERS TO THE EDITOR

SALUTING

To The Editor of the U.S.I. "Journal."

Dear Sir,

As one who spent much time at Sandhurst learning to salute correctly, may I protest against the distressing contortions which to-day pass as a salute with so many soldiers.

It seems to me that the present method of teaching must be on the follow-

ing lines:

One.—Throw the head well back.

Two.—With a forward and upward motion, place (with a slight quiver) the back of the hand against the right eyebrow, palm outward, fingers pointing vertically. The right elbow well forward.

Three.—Lower the hand gently to the side.

In support of my complaint, I would mention that a senior officer lately released from three years in Changi Jail asked me, in all seriousness, whether the Army had adopted a new salute since he had been a prisoner.

S. E. A. C.

Yours faithfully, A. W. MILLS, Lieutenant-Colonel.

WHAT A "STIFF" OFFICER MISSED

To the Editor of the U.S. I. "Journal"

Dear Sir,

After many years out East, what were some of the things I missed during my recent couple of months' stay in England? Here are some of them.

my recent couple of months stay in England! Here are some of them

I missed the old milk-cart on its daily rounds; its brightly burnished big milk urn; its well-groomed horse; and the milkman with his picturesque blue striped apron, were familiar sights in my young days.

I did not see many—if, indeed, any—of those poles which used to be placed outside hairdressers' shops. You may remember they had gaudily painted

stripes round them.

The old muffin man—how well I remember during the cold winter evenings, with his hand-bell, his board on his head, and his muffins covered with a green baize cloth?

The young perky butcher's boy, with that curiously shaped board on his head, is now no more. Possibly he has been one of war's casualties, never to return.

You remember those huge glass bottles which used to stand in chemist's windows, and which were filled with some colourful liquid? I seem somehow not to have seen any of those. The increased sale of popular medicines has probably something to do with their disappearance, for chemists' windows look much better dressed with them than the old bottles.

As with the old horse-drawn trams, the "twopenny tube" from Clapham Common to the City, the horse-drawn fire engines, the postman's uniforms, and

many other things at Home, they all seem to have gone for good.

Yours faithfully. "VISITOR."

Bangalore.

IS THIS A RECORD?

To the Editor of the U.S. I. "Journal"

Dear Sir,

There are many Indian Commissioned officers who have attained the rank of Brigadier and of Colonel, but I think I am correct in saying that they are all direct commissions.

The appointment lately of my old friend Sindhu Deen (I.C.O.3.) as Deputy Inspector-General of the Burma Army, with the rank of full Colonel and the award to him of the M.C. last month, make an opportunity of drawing attention to a career which is probably unique in the annals of the Indian Army, as Colonel Deen has risen to his present position from the ranks. Do you know of any other such case?

The following is Colonel Deen's military history, which he has given me permission to reproduce:

Recruit, 2/20 Burma Rifles		1924
Lance-Naik		1925
Naik		1926
Havildar		1927
Jemadar	• • •	1930
I.M.A		1932-34
2nd. Lieutenant		1934
Lieutenant		1935
Captain		1942
A/Major		1943
Staff College, Quetta		1942-43
A/LieutColonel	• •	1945
A/Colonel	• •	1946

He was awarded the Sword of Honour at the I.M.A., was mentioned in dispatches in 1942 and in 1945, and was awarded the M.C. in the latter year.

An interesting sidelight is that an officer who was Colonel Deen's Company Commander when Colonel Deen was a Lance-Naik is now a Lieut.-Colonel in the same station with him!

Yours faithfully, R. M. HALL.

Bassein, Burma.

SCHOOLS FOR SOLDIERS' DAUGHTERS

To The Editor of the U.S.I. "Journal."

Dear Editor,

I would like to add my congratulations to Anand for his excellent article in the *Journal* for January 1946, which I have just received.

Excellent post-war institutions and schemes for the education, instruction and uplift of the Indian soldier and his sons, as memorials for their work in the last war, are well on their way. K.G.R.I.M. Schools are being enlarged or in creased; a plan model of the Indian National War Memorial Military Academy has been published.

But what is being done for the education and uplift of the daughters: these soldiers? After the youths of the country have been enfightened and uplifted, whom are they going to marry to make their future wives, mothers and sisters?

Is there a single girls' school in India which turns out young women worthy to be mothers, wives and sisters of their future fighting forces? Indian officers and gentlemen have to depend on Christian Mission and Church Schools for the education of their daughters, or are compelled to send their daughters to schools in the U.K. Some of the better class European Schools in India suffer from the snobbery of not admitting Indian girls, and pride themselves on such small-mindedness.

We must have schools for the daughters of the Fighting Forces of India side by side with those for their sons. There must be Garrison Schools in every Cantonment, where families are allowed, for girls and boys (of the pre-K.G.R.I.M. School age). These schools should be affiliated to the civilian schools of the Government Education Department.

There must be Queen or Princess Elizabeth R.I.M. Schools for the girls of Indian Fighting Forces up to the pre-university entrance stage. These must be boarding schools, where the girls will learn self-reliance and resource, and develop character without the inhibitory influence of their parents. It is absurd to argue that Indian parents will not send their daughters to such schools. They will, if the confidence of the parent has been established and the value of such institutions is pointed out to them. A considerable number of young Indian women broke away from their chains when they joined the WAC(I) and other Women Services during the war; a good many of these must recollect their fear, lack of experience and resource when they made their first journey in India unaccompanied by parent or relation. These alone will assist in enlightening their parents and encourage their younger sisters to avail of the advantages of such schools.

These schools must not be cheap. Nothing good can be had cheaply. They should be sufficiently endowed to allow the daughter of a Sepoy to have the same standard of instruction, accommodation and feeding as the daughter of a Commissioned Officer or Sirdar. The education should be on broad lines, domestic and academic, the latter chiefly for those who wish to include in university or professional careers. Games and sports must be encouraged.

The staff for a start must be imported from the U.K.; otherwise the undesirable product of the Mission Schools would be all that is available in India.

If each Regiment and Corps of the Indian Army, Navy and Air Force would endow a studentship, valued at, say, Rs. 3,000 per year as a memorial to each battalion and unit they raised in the war, and the Indian States similarly endowed studentships for which they had the right to nominate a candidate so long as she conformed to the necessary standard for admission to the Institution, with the generous and big-minded support of the State, it should be possible to establish a school for say a hundred girls for a start in Dehra Dun or the Simla Hills almost immediately.

It will achieve nothing if the youth of the country are enlightened and their girls are allowed to lag behind.

Yours truly, "CHARLES".

NOTES BY THE SECRETARY

Annual Meeting of Council

LIEUTENANT-GENERAL Sir Arthur Smith, K.B.E., C.B, D.S.O., M.C., President of the United Service Institution of India, presided at the annual meeting of the Council on May 21, the other members present being: Air Marshal Sir Roderick Carr, (Vice-President), General A. R. Godwin-Austen, Lieutenant-General Sir Clarence Bird, A. D. Flax Dundas, Esq., Lieutenant-General C. M. P. Durnford, Lieutenant-General R. A. Savory, and Hugh Weightman, Esq. Apologies for inability to attend owing to their absence from Delhi were received from Lieutenant-General Sir Noel Beresford-Peirse, Lieutenant-General K. M. Loch, Captain W. J. Lifton, R.I.N., P. Mason Esq., Vice-Admiral Sir Geoffrey Miles, Lieut-General H. H. The Maharaja of Jammu and Kashmir, Air Vice Marshal H.H. Maharaja Bahadur of Jodhpur, Colonel H. H. the Maharaja Jam Saheb of Nawanagar, Major-General H.H. The Maharaja of Patiala.

The President reported a continual rise in membership, which had again reached a record figure. Financially the Institution was in a very healthy condition, despite the increased costs inevitable in wartime. More members were availing themselves of the facilities of the Library of the Institution, nearly 1,000 books having been borrowed by members during the year.

Mainly owing to retirements, the President explained, many changes had occurred on the Council. His predecessor, Lieut.-General Sir John Swayne had relinquished the office of President on leaving for England to take up his appointment as Adjutant-General of the Forces—an appointment which his many friends had been sorry to learn he had been unable to assume owing to ill-health. Air Marshal Sir Roderick Carr had become Vice-President, and the other ex officio members were now Vice Admiral Sir Geoffrey Miles, A. D. Flax Dundas, Esq., and Hugh Weightman, Esq. Among the elected members Major-General J. B. Dalison (to whom the Institution was most grateful for his work as Chairman of the Executive Committee), Lieut.-General Sir T. J. Hutton, Captain H. E. Felser Paine, Major-General D. A. L. Wade and Lieut.-General Sir H. B. D. Willcox had not offered themselves for re-election, and he was sure that members would wish him to place on record their deep appreciation of the services rendered by those members in the past.

After discussion, it was agreed that the subject of the 1946/47 Gold Medal Essay Competition should be "Man Management". Entries for the competition would close on June 30, 1947.

It was decided that a recommendation that the MacGregor Memorial Medal for 1946 be awarded to Major P. A. THOMAS, I.E., should be submitted to H.E. The Commander-in-Chief for his work in connecting the system of triangulation in Iraq and Persia with the Great Trigonometrical series of India, thus completing the only missing link in the system of triangulation extending from Europe to the Far East. The recommendation of the Executive Committee that a second silver medal, with Rs. 100 gratuity, be also awarded to Subedar M. Z. A. Quraishi for the fine work he performed in assisting Major Thomas was also accepted.*

^{*}H. E. The Commander-in-Chief has since approved these two recommendations, and has asked that his congratulations be extended to the two recipients for their fine work.

It was decided that the Executive Committee for 1946/47 should be composed of: Lieut.-General R. A. Savory, (Chairman), General A. R. Godwin-Austen, Lieut.-General K.M. Loch, Philip Mason, Esq., and Captain W. J. Lifton, R.I.N.

Council Election

The result of the Council election for 1946 showed that the following members had been re-elected: Lieut.-General Sir Clarence Bird, K.C.I.E., C.B., D.S.O., Philip Mason, Esq., C.I.E., O.B.E., Lieut.-General R. A. Savory, C.B., D.S.O., M.C. New members elected to the Council were General A. R. Godwin-Austen C. B., O.B.E., M.C., Lieut.-General Sir N. B resford-Peirse, K.B.E., C.B., D.S.O., Lieut.-General C. M. P. Durnford, C.B., C.I.E., Captain W. G. Lifton, C.I.E., R.I.N., and Lieut.-General K. M. Loch, C.B., M.C.

Honours and Awards

The following awards to members of the Institution for meritorious conduct whilst prisoners of war in Japanese hands are announced:

O.B.E.—Lieutenant-Colonel C. C. Deakin, D.S.O., 5/2 Punjab Regiment.

M.B.E.—Major Kanwar Bahadur Singh, Kumaon Regiment; Captain Apparanda Chegappa Iyappa, I.S.C.

The M.C. has been awarded to Major J. F. Worsley, 3/2 Punjab Regiment and Captain P. G. Malins, R.I.A.S.C., for gallant and distinguished services in South East Asia after August 15, 1945.

King's Birthday Honours

Among those on whom His Majesty conferred honours in the Birthday Honours List were the following members of the United Service Institution of India:

- K.C.B.—Lieut.-General R. M. M. Lockhart, C.B., C.I.E., M.C.; Lieut.-General Sir Arthur F. Smith, K.B.E., C.B., D.S.O., M.C., Chief of the General Staff, and President of the United Service Institution of India.
- C.B.-Major-General R. S. Lewis, C.B.E.; Major-General R. P. L. Ranking, C.B.E., M.C., Major-General D. A. L. Wade, O.B.E., M.C.
- K.C.S.I.—General Alfred Reade Godwin-Austen, C.B., O.B.E., M.C., P.A.O., G.H.Q.
- C.S.I.—Hugh Weightman, Esq., C.I.E., I.C.S., Secretary, External Affairs Department, and an ex-officio member of the Council of the U.S.I. of India.
- K.C.I.E.—Lieut. General K. M. Loch, M.G.O. in India, and a member of the Council of the U.S.I. of I.; Naravanan R. Pillai, Esq., C.I.E., C.B.E., I.C.S.; Sir Kenneth Mitchell, C.I.E., I.S.E.; Sir George Tottenham, C.S.I., C.I.E., I.C.S.
- C.I.E.—Major-General J. S. Ballentine; Major-General D. R. E. R. Bateman, D.S.O., O.B.E.; G. W. Benton, Esq., D.I.G.P., C.P. and Berar; Henry Crookshank, Esq., Geological Survey of India; Brigadier R. G. Ekin, Commander Nowshera Brigade; Lieut.-Colonel A. C. Galloway, Political Agent, Behrain; Brigadier W. Hesketh, Director of Mechanisation, G.H.Q.; J. E. Moloney, Esq., Director of Shipbuilding, G. of I.; Major-General F. M. Moore; Colonel H. Mac-Donald, D.D. of Recruiting, Northern Area, Brigadier M. S. Teversham, Director of Quartering, G.H.Q.

Knighthood.—Arthur W. H. Dean, Chairman, Delhi Improvement Trust. C.B.E.—Brigadier R. Gardiner, O.B.E., R.E.; Brigadier H. Williams, R.E.

O.B.E.—Major-General A. R. K. Chib Bahadur, M.B.E., Alwar State Forces; Colonel W. D. H. Bayts; Colonel G. Barnett, M.C., R.A.V.C.; Brigadier G. A. Bain; Captain I. S. Chopra; Lieut. Colonel H. E. M. Cotton; Lieut.-Colonel T. C. Crichton, M.C.; Brigadier J. M. Hobbs; Colonel C. E. Thompson, J.A.G. Department; Lieut.-Colonel R. S. Weightman, R.A.; Brigadier J. Wickham.

M.B.E.—Lieut.-Colonel R. Bristow, I.A.O.C.

New Members

The following new members have been elected to membership of the Institution during the past three months:

Afzal Khan, Major M.

Bagwell-Purefoy, Lieut.-Colonel A. E.

*Bond, Major D. A.

Burrows, H. E. Sir Frederick, K.C.S.I., Governor of Bengal.

Carr, Air Marshal Sir Roderick, K.B.E., C.B., D.F.C., A.F.C.

*Chand, Captain S. P.

Chapman, Captain M. W.

Chappel, Major-General B. H., D.S.O.

Chaudhuri, Brigadier J. N., O.B.E.

Clements, Lieut.-Colonel, A. E.

Cowgill, Lieut.-Colonel A.W., M.B.E.

Cunningham, Major J. J. V. C.

*Daine, Captain P. E. L.

Donovan, Major J. P. H.

Drummond, Colonel C. A. F., O.B.E.

Ellis, Captain N. A.

Ellis, Captain T. F.

Evans, Major A. Conway.

Flewett, Lieut.-Colonel T. E.

Forbes, Lieut.-Colonel L. C.

Foss, Lieut.-Colonel T. F.

Fowler, Major R. A. J., M.C.

Fryer, Major R. H.

Giles, Captain R. M.

Griffiths, Major G. B.

Gooday, Lieut, E. G.

Grant-Taylor, Lieut.-Colonel L. H.

Hamid, Lieut.-Colonel M. A.

Harpal Singh Bedi, 2/Lieut.

Herbert, Lieut.-Colonel A. E.

Hoshiar Singh, Major.

Hamilton, Lieut.-Colonel G. J., D.S O.

Harmandar Singh, Capt.

*Herriott, Captain A. D.

Hewett, Captain R. W.

Jackson, Lieut.-Colonel G. E.

Johnstone, Major A. J. F.

Khan, Lieut. A. W., R.I.N.V.R.

Khan, Major I.D.A.

Lockhart, Lieut.-Colonel W. E.

McAlister, Captain R. W. L.

Meik, Lieut.-Colonel D. C.

Miles, Vice-Admiral Sir Geoffrey, K.C.B.

Macnamara, Colonel C. V.

Mallam, Lieut.-Colonel G. L., C.I.E.

Mehta, Captain V.

Menon, Lieut. A. M.

Menezes, Major S. L.

*Milligan, Major W. A.

Mohammed Sher Ali Khan, Colonel Nawabzada.

*Montagu, Lieut.-Colonel J. D.

Morris, Brigadier A. DeBurgh, D.S.O.

Mudie, H. E. Sir Francis, K.C.S.I., K.C.I.E., O.B.E., Governor of Sind.

Paradkar, Captain A. D.

*Packwood, Lieut.-Colonel S. W.

*Prithvi Pal Singh, Major Rogers, Lieut.-Colonel H.

Rooke, Lieut.-Colonel H. T. B. B.

Raja, Major K. A. S.

Rashid, Major I.

Rikhye, Major I. J.

Robinson, Lieut.-Colonel F. G.

Robson, 2/Lieut. B.E.

Roe, Captain K. P.

Russell, Major W. A., M.C.

Sawhny, Major L.

Scott, Major W. N.

Scouller, Major R. E.

Smith, Lieut.-General Sir Arthur F., K.C.B., K.B.E., C.B., D.S.O., M.C.

Satinder Singh, Captain.

Sheodatt Singh, Colonel Thakur.

Sibree, Captain P. L.

Smith-Ansley, Lieut.-Colonel J. W.

Smitherman, Lieut.-Colonel P. H.

Surita, Major I. B., M.C.

Tanner, Colonel W.

Thomas, Lieut.-Colonel G. F. J.

Triggs, Colonel R. G.

Vickers, Lieut.-Colonel J. S., D.S.O.

Weightman, Hugh, Esq., C.S.I., C.I.E., I.C.S.

White, J., Esq.

Woodward, Lieut.-Colonel R. S., O.B.E.

Other subscribing members who have enrolled during the past quarter include:

Headquarters, No. 227 Group, Royal Air Force. (for forty copies quarterly).

Hon. Library Secretary, United Services Gymkhana, Nasik Road. P. M. C. 2nd Sikh F. F. Regiment.

U.S.I. ESSAY GOLD MEDALLISTS

And MacGregor Memorial Silver Medallists

A member has been good enough to suggest that we publish a list of winners of the Gold Medal Essay Competition, conducted annually by this Institution, and also a list of those who have won the MacGregor Memorial Silver Medal, inaugurated in 1887.

Several members have, it will be noticed, won the Gold Medal Essay Competition twice, among them being Captain J.A.S. Colquhoun (1873 and 1874), Colonel J.P.C. Neville (1895 and 1899), Lieut.-Colonel F. S. Keen, D.S.O. (1920 and 1923), Major L. E. Dennys, M.C. (1926 and 1929), and Major (now Lieutenant-General) C.M.P. Durnford, (1930 and 1934).

A study of the lists reveals the interesting record of Major G. Cockerill (now Brigadier-General Sir George Cockerill, C.B. happily still living in retirement in London), who has won both the Gold Medal Essay Competition and also the MacGregor Memorial Silver Medal.

Winners of the Gold Medal Prize Essay have been-

```
1872 Roberts, Lieut.-Col. F.S., V.C., C.B., R.A.
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1873 Colquhoun, Capt. J.A.S., R.A.

1874 Colquhoun, Capt. J.A.S., R.A.

1879 St. John Major O.B.E., R.A.

1880 Barrow, Lieut. E.G.

1882 Mason, Lieut. A.H., R.E.

1883 Collen, Major E.H.H.

1884 Barrow, Capt. E.G.

1887 Yate, Lieut. A.C.

1888 Maude, Capt. F.N., R.E.

1889 Duff, Capt. B.

1890 Maguire, Capt. C.M.

1891 Cardew, Lieut. F.G.

1893 Bullock, Major G.M., Devon Rgt.

1894 Carter, Capt. F.C., N'land Fus.

1895 Neville, Lieut.-Col. J.P.C.

1896 Bingley, Capt. A.H.

1897 Mullaly, Major H., R.E.

1898 *Clay, Capt. C.H.

1899 Neville, Col. J.P.C.

1900 Thuillier, Capt. H.F.

1900 *Lubbock, Capt. G.

1901 Ranken, Lieut.-Col. G.P.

1902 Turner, Capt. H.F.F.

1903 Hamilton, Major W.G., D.S.O., Nflk. Regt.

1904 *Bond, Capt. R.F.G., R.E.

1904 MacMunn, Major G.P., D.S.O.

1905 Cockerill, Major G., Roy. War Regt.

^{*}Specially awarded a silver medal.

1907 Wood, Major E.J.M., 9th Deccon Inf.

1908 Jeudwine, Major H.S., R.A.

1909 Molyneux, Major E.M.J., D.S.O., 12 Cav.

1909 Elsmie, Lieut.-Col. A.M.S., 56 Rif.

1911 Petrie, D. Esq., Punjab Police.

1912 Carter, Major B.C., The King's Regt.

1913 Thomson, Major A.G., 58 Rif.

1914 Bainbridge, Lieut.-Col. W.F., D.S.O., 51 Sikhs.

1914 *Norman, Major C. L., M.V.O., Guides.

1916 Crum, Major W.E., Calc. L. H.

1917 Balker, Major W.F., R.F.A.

1918 Gompertz, Capt. A.V., M.C., R.E.

1919 Gompertz, Capt. M.L.A., 108 Inf.

1920 Keen, Lieut.-Col. F.S., D.S.O., 15 Sikhs.

1922 Martin, Major H.G., D.S.O., O.B.E. R.A.

1923 Keen, Lieut.-Col. F.S., D.S.O., I.A.

1926 Dennys, Majer L.E., M.C., 12 F.F.R.

1927 Hogg, Major D. McA., M.C., R.E.

1928 Franks, Major K.F., D.S.O., 5 M.L.I.

1929 Dennys, Maj L.E., M.C., 12 F.F.R.

1930 Durnford, Major C.M.P., 5 Raj. Rif.

1931 Ford, Lieut.-Col. G.M., 5 M.L.I.

1932 Thorburn, Lieut. R.G., Cameronians.

1934 Durnford, Major C.M.P., 6 Raj. Rif.

1937 Ranking, Lieut.-Col. R.P.P.L., M.C., 2 R. Lrs.

1938 Milne, Major J. D., R. Scott.

1945 Foucar, Col. E.C.V., M.C.

MacGregor Memorial Medal

Recommendations for the award of the MacGregor Memorial Medal should be submitted by May 1 of each year.

The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor, who founded the United Service Institution of India. It is awarded for the best military reconnaissance or journey of exploration of the year which, during the war, may have been achieved during an escape from a Far Eastern enemy country into, for instance, India.

The awards are made in June, and are: (a) For officers, British or Indian, silver medal, and (b) for soldiers, British or Indian, a silver medal with Rs. 100 as gratuity. For especially valuable work, a gold medal may be awarded in place of one of the silver medals, whenever the administrators of the Fund deem it desirable. The Council may also award a special additional silver medal, without gratuity, to a soldier, for specially good work.

The award of the medals is made by His Excellency the Commander-in-Chief, India, as Vice-Patron, and the Council of the United Service Institution of India, who were appointed administrators of the Fund by the MacGregor Memorial Committee.

Eligibility for the award is open to: (a) Officers and other ranks of all forces of the British Commonwealth of Nations while serving with the India Establishment, or with South East Asia Command, (b) Officers and other

^{*}Specially awarded a silver medal.

ranks of the Royal Indian Navy, Indian Army, Indian Royal Air Force and of the Indian States Forces, wherever serving. The term "Indian Army" includes the Indian Auxiliary and Territorial Forces, Frontier Militia, Levies, Military Police and Military Corps under local governments).

Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal; but, in the event of two journeys being of equal value, the man who has incurred the greater risk will be considered to have the greater claim to the award.

When the work of the year has either not been of sufficient value or notice of it has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief in India to deserve it.

The medal may be worn in uniform by Indian soldiers on ceremonial prades, suspended round the neck by the ribbon issued with the medal. Replacements of the ribbon may be obtained on payment from the Secretary, United Service Institution of India, Simla.

Officers who have won the MacGregor Memorial Medal since the establishment in 1887 are:

```
1889 *Bell, Col. M.S., V.C., C.B.E., R.E.
1890 Younghusband, Capt. F.E., K.D.Gs.
1891 Sawyer, Major H.A., S.C.
1892 Vaughan, Capt. H.B., S.C.
1893 †Bower, Capt. H., 17th B.C.
1894 O'Sullivan, Major G.H.W., R.E.
1895 Davies, Capt. H.R., Oxf. L. I.
```

- 1896 Cockerill, Lieut. G.R., 28th P.I. 1897 Swayne, Capt. E.J.E., 16th B.I.
- 1898 Walker, Capt. H.B., D.C.L.I.
- 1899 Douglas, Capt. J.A., 2nd B.L. 1900 Wingate, Capt. A.W.S., 14th B.L.
- 1901 Burton, Major E.B., 17th B.L.
- 1902 Ray, Capt. M.R.E., S.C. 1903 Manifold, Lt.-Col. C.C., I.M.S.
- 1904 Fraser, Capt. L.D., R.G.A.
- 1905 †Rennick, Maj. F., 40th Pathans.
- 1906 Shahzada, Ahmad Mir. Risr, 36th Horse.
- 1907 Nangle, Capt. M.C., 92nd Punj. 1908 †Gibbon, Capt. C.M., R. Ir. Fus. 1910 Sykes, Maj. P. M., C.M.G., 2nd D.G.
- 1910 Turner, Capt. F. G., R.E.
- 1911 Leachman, Capt. G E. R., Suss. R.
- 1911 Gurmukh Singh, Jemdr., 93rd Burma Infantry.
- 1912 †Pritchard, Capt. B. E. A., 83rd L.I.
- 1912 Wilson, Lieut. A. T., C.M.G.; 32nd Lrs.
- 1913 Abbay, Capt. B. N. 27th Cav. 1914 Bailey, Capt. F. M., I.A.
- 1914 Morshead, Capt. H. T., R.E.
- 1915 Waterfield, Capt. F. C., 45th Sikhs.
- 1918 Noel, Capt. E. W. C., D.S.O., Poll. Dept.

1919 Keeling, Lt.-Col. E. H. M.C., R.E.

1920 Blacker, Capt. L. V. S., Guides.

1921 Holt, Maj. A. L., O.B.E., R.E.

1922 Abdul Samad Shah, Capt. O.B.E., 31st Lrs. 1923 Bruce, Capt. J. G., 2/6th Gurkha Rif. 1925 Spear, Capt. C. R., 13 F.F. Rif.

1926 Harvey-Kelly, Maj. C. H., G. H., D.S.O., 10 Baluch Regiment.

1927 Lake, Maj. M. C., 4 Bombay Grs.

1928 Boerman, Capt. J. F., 10 Baluch Regt. 1930 Green, Capt. J. H., 20 Burma Rif. 1931 O'Connor, Capt. R. L., 9 R. Jat R. 1932 Birnie, Capt. E. St. J., Sam Browne's.

1935 Ferguson, Lt. K.A.P., R.A.

1935 Bostock, Lt. T. M. T., R.E.

1936 Angwin, Capt. J. B. P., R.E.

1937 Goadby, Maj. F. R. L., M.B.E., 6 Raj. Rif.

1939 Lancaster, Maj. A. S., 10 G.R.

1940 Hammond, 2nd-Lt. R. R., Norfolk R.

1942 Tekbahadur Limbu, Subedar, N. S. S., Bn., B. F.F.

1943 Wingate, Major-Genl. O. C., D.S.O.

As announced in the report of the annual Council Meeting, the medal for 1946 has been awarded to Major P. A. Thomas, I.E.

The Iournal of the

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GOLD MEDAL PRIZE ESSAY COMPETITION

The Council has selected the following subject for the Gold Medal Prize Essay Competition for 1947:

"MAN MANAGEMENT"

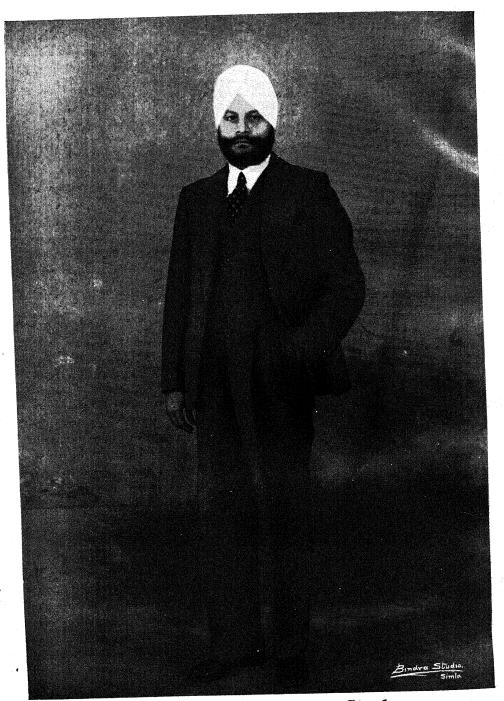
Entries are invited from all commissioned officers of His Majesty's Forces, from gazetted officers of the Civil Administration in India, and from officers of the Indian States Forces.

Essays, which should be typewritten (double spacing) and submitted in triplicate, must be received by the Secretary, United Service Institution of India, Simla, on or before June 30, 1947. In order that the anonymity of each candidate should be preserved, a motto should be written at the top of each entry. A sealed envelope, bearing on the outside the motto, and containing inside the name and address of the author of the essay, must accompany each entry.

Entries should not exceed fifteen pages (approx. 8,000 words) of the size and style of the Journal. Should any authority be quoted in the essay, the title of the work referred to should be given.

Three judges chosen by the Council will adjudicate. They may recommend a money award not exceeding Rs. 500, either in addition to, or in substitution of, the Gold Medal, and will submit their decision to the Council. The name of the successful candidate will be published in the October, 1947 issue of the Journal.

Copyright of all essays submitted will be reserved by the Council of the United Service Institution of India.



The Hon. Sardar Baldev Singh.

Defence Member in the Interim Government

THE Hon. Sardar Balder Singh was, until his appointment as Defence Member, Minister for Development and Civil Supplies in the Punjab Coalition Ministry, and before holding that office had been Development Minister in the former Punjab Unionist Ministry. He was Leader of the Panthic Akali Party in the Punjab Legislative Assembly. Aged 43, he is the son of Sardar Sir Indar Singh.

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The views expressed in this Journal are in no sense official, and the opinions of contributors in their published articles are not necessarily those of the Council of the Institution

MATTERS OF MOMENT

M ILLIONS of pounds have been spent on atomic bomb tests—they are said to have cost no less than £125,000,000. They have proved what they were expected to prove—that atomic bombs represent a threat

The Atomic Bomb Tests to mankind just as appalling as sober scientists knew before the tests were made. First reports of the explosion in the air were, we suggest, completely and dangerously misleading. In sweeping generalisations

the world was told that the bulk of the guinea pig fleet had survived. Such reports lull people into the false assumption that the atom bomb is not so serious after all; that it is just "another bomb". Fortunately the world public has been able to watch in news reels the effect of the greatest destructive force known to man; it was an awe-inspiring and unforgettable spectacle which left no shadow of doubt in the minds of those who saw it that we now live in an age which may see our whole conception of life changed. It is not sufficeint to know that this new form of attack is wholly different in kind from all bombs based on chemical explosion; it is not sufficient to realise that if such bombs are loosed by any one Power it will mean a catastrophic break in the world's cultural development. The destructive efficiency of atom bombs was proved long ago. What we must avoid is the mistake of assessing the effect of an atomic bomb in terms of destruction to ships' structures; ships may be destroyed, towns and buildings razed to the ground; but if manpower is killed, then armies, fleets, airforces, munition-making centres can all be effectively crossed off the lists.

To measure the significance of atomic energy in warfare by the yardstick of destruction of ships is wilful blindness, for it has already been

Appalling Destructive Power proved that living beings in the vicinity of the explosion suffer instant incineration from the terrific heat set up by an atomic bomb. At Hiroshima the first bomb exploded over a level expanse of more than ten

miles of wooden houses, destroying four square miles first by blast and then by fire; of the 320,000 people in the town, approximately 80,000 were killed. Whereas Hiroshima had the effect of being consumed by fire, Nagasaki had the appearance of having been struck by a hurricane, with its wrecked skeletons of factory sheds leaning away from the heat; of the 100,000 people estimated to have been in the industrial valley at Nagasaki, 40,000 were killed. That brief reference to atomic destructive power is more enlightening than the fact that no capital ship was actually sunk at Bikini in the first test.

* * * *

We must leave it to our statesmen to see that there is a proper appraisal of these experiments in the public mind. The task of military

Strategic Geography has Changed students, and of all whose profession is that of arms, is to review all strategic plans and, indeed, the whole strategic geography of the world, in the light of this new force. Modern war, as General Tuker wrote in 1944, now

force. Modern war, as General Tuker wrote in 1944, now takes place from the interior of one country into the interior of another, and not against its borders. Defence will not only be on the frontiers of a country, but will have to be powerfully maintained over the face of a whole country; rockets—and atom bombs—directed by radio on to predetermined targets point to the vital necessity of dispersal in the interior of a country, and in this connection we draw special attention to the thought-provoking and realistic article in this issue by General Boucher. That article has particular reference to India, but we need also to ponder over the fact that these new instruments of war have changed the relative importance of strategic points throughout the world. The Mediterranean, for instance, can be said to have lost much of its importance as a main shipping route, as it cannot now be defended by superior sea power alone, and the Cape route to the Far East may again come into its own. Dakar, on the West African coast, will have far more significance in American strategical plans than it has had hitherto; and there are many other examples which could be quoted to show that radar, atom bombs, radiocontrolled rockets and other engines of war force upon us the inexorable fact that there is need for all to study, to plan, and to think deeply. Our ideas must not be of the "parochial pump" variety; they must go far afield. It behoves every officer of every Service to keep himself up to date by reading, studying and enriching himself with knowledge, for if he does not do so, and the time comes when he must apply that knowledge, he can be certain of at least one thing: he will be too late.

** **

-ANY IMPORTANT points of personal interest to officers emerge from the informative address—a full report of which appears in this issue-recently delivered by H. E. The Commander-in-Chief at the Staff College, Quetta. One problem which is still disturbing is the re-

luctance of Indian youths with character, enterprise and zeal to offer themselves as officers of the future The Indian Army. Why is this so? The Indian Army will Officer Shortage in the comparatively near future be India's own Army, manned by Indians, guarding its shores, defending it in case of attack, and available in case of need for internal security work. training, fighting, playing and living together have welded it into a strong arm, and have given it a tradition second to no other Army in the world. That is no mere "sales talk;" it is cold, hard fact. If we say it has developed under the guidance of Britain, we say it with a sense of pride-not the pride of self-esteem, but pride that men of two nations should have worked together in such harmony and with such success in the building of the structure. Credit for the achievement is mutual. To continue the work young Indians with the right spirit have for months past been invited to offer themselves as candidates for commissions in the Armed

Forces. Why are they reluctant to come forward? Soldiering is an honourable profession; it carries with it certain privileges, and demands in return those qualities which make men—character, leadership, skill, and grit. Every nation has such men; India has them, as she has shown during the war.

Some may say that the men have come forward, but that the method of selection has been responsible for their rejection. In this connection we

The Position in Brief would draw the attention of readers to two articles on the subject in this issue. The writers have stated their case with moderation and clarity, and the criticisms deserve careful consideration. Is it a fact, however,

that the method of selection is a contributory cause of this poor response to the appeal for officers? Many people have probably been nearer the correct reason in suggesting that it is due to insufficient emphasis being placed on the subject during student days. That aspect, however, has now been taken in hand, and a Committee is working out how best to meet it. The whole subject of officer shortage is, however, really touching closely each and every officer in the Army, and particularly our Indian colleagues. What, in brief, is the position? India is about to have its own Army—not a new Army, but one fully trained and equipped; its peoples, whether they like it or not, must have an Army; and it must be officered; and from a population of 400,000,000 the Army alone, as was mentioned in our last issue, requires about 9,000 officers; all sources at present yield 5,100, of whom about 3,000 are pre-war regular officers, the majority British.

Can it be seriously suggested that the youth of India is faint-hearted, languid and lacking that spirit which makes fighters? An occasional

glance at any newspaper refutes that fear. Discipline A Personal they may and often do lack; but vigour and pep are Matter for usually there in full measure. Allowing that India Officers has the men, how are the Armed Forces to attract them? Personal publicity, we suggest, is one way which would be most productive. Officers in the Forces, who can look the world straight in the eyes and be proud of their profession, are the men who can get results. They know which of their sons, their nephews, their friends will make officers. A persuasive talk from a serving Indian officer is worth more than other forms of publicity, and if every officer made it a point of honour to bring along each year one Indian of the required physique, he would not only be helping to develop a sense of patriotism, of love for country, but would be materially helping to secure for all time that deep respect which citizens have for their soldiery.

It is a matter for regret that there are in India no military correspon-

dents of the Indian Press, as is the case in America and Britain. It may be that in its new sphere the Indian Press will seek to Educating educate the people on the defence problems of their Public country, and we suggest that this is an idea on which Opinion those who control the Press here might do well to ponder seriously, for such writers would in time achieve a following of well-read, thoughtful people. Those military correspondents would have a heavy responsibility; they would themselves be keen students of military history; would keep the reading public well-informed on matters military; would interpret the thoughts of military leaders to the public. Here, indeed, is an opportunity for one or two leading Indian journalists to work for the common weal. The Indian Press needs a Cyril Falls. Once such experts have their following they can wield immense influence, and by Press, radio and public speaking inculcate a new spirit in the minds of the more advanced Indians. A sane and sensible Press is, indeed, one of the firm foundations of any great self-governing nationand India will be no exception to this rule. If we may venture to suggest it, editors of the more enlightened Press, having the good of the country at heart, might seriously consider themselves directing public attention to the Army. The need for introducing the right type of youngster into the commissioned ranks gives them an admirable lead.

WITH THE run-down in strength of the Indian Army, considerable re-organisation is taking place, one of which is of no small importance to the regimental officer. We refer especially to Welfare, which on

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the closing of the Welfare General's Branch will henceforth be an "A" subject. That does not mean that Welfare qua Welfare will suffer. The change is rather one of numbers than Every Officer A of purpose, and though, perhaps understandably, the Welfare thought has arisen that "welfare" is a specialist duty, Officer that thought will have to disappear now that the Armed Forces are being placed on a peace-time basis. That "Welfare" is the work of someone outside the unit is a dangerous idea, probably fostered by the attention devoted to the subject during the War. We have, however, now to realise more than ever that every officer is a welfare officer, not merely thinking in terms of procuring and providing amenities, but ever ready to extend a sympathetic personal interest in the life and work of his men.

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Mutual confidence and mutual respect between officer and man are two essential qualifications in the relations between the two. There need

be nothing sloppy or sentimental about it. If an offi-Some cer is efficient at his job his men will have confidence "Welfare" in him; there will develop a sense of unity—a team **Pointers** spirit; in games, in recreation, the good officer joins in and enjoys it. Let saluting be a greeting between comrades—and let it be accompanied by a "salaam" and not merely a lifting of the hand. Knowing men as individuals and knowing their characters—the sulky, the goodhumoured, those that are lazy, the hard working, the grumblers-is one of the surest indications of a good officer. An efficient officer never forgets that his men see things differently, and always keeps them "in the picture"; he meets his men in the lines, finds out their interests (if you know him, the simplest sepoy has some pet subject). Strict discipline and good welfare go together; welfare aims at keeping men happy and contented; it does not mean pampering them. The "good" officer will look out for ways and means of improving and changing things for his men; will encourage as well as blame; will have a cheerful word and a smile. In short, looking after men's welfare is a big job, and if tackled with enthusiasm will benefit the officer, the men, and the unit.

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T IS GOOD news that the Secretary of State for War in London has determined that education in the post-war British Army is to continue on the same broad lines which were so outstandingly successful in the late war. His plans provide for universal community education in

Army
Education

Army
Eitizenship and current affairs topics; voluntary individual education; and resettlement education. It is all to be organised on three levels—the elementary stage; the intermediate stage, which will apply to the bulk of

Army personnel on a unit basis; and the advanced stage for further and more specialised education. "It is my intention", said Mr. Lawson, "to identify Army education as closely as possible with civil education". Men

in modern Armies are decidedly better soldiers when they are well-informed, and it cannot be gainsaid that the A.B.C.A. system of pamphlets and Map Reviews paid handsome dividends. It is so highly regarded in Great Britain that those who directed A.B.C.A. have now been called to take charge of an identical scheme for the civilian public; (India as a whole is far behind the general public in Britain in its knowledge of current affairs, but the expansion of the system among India's educated public is worth considering).

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Mr. Lawson recognised that compulsory military service would interrupt that period of a young man's life normally devoted to educational

The I.A.E.C.

and vocational training; in civil life much of this vocational training would be carried out in his employers' time, and as far as the exigencies of the Service allowed, similar facilities would be made

appointment to the Educational Board of Officers concerned with military training, ("Education" being an "A" matter in the British ing, the Educational ("Education" being an "A" matter in the British Army, in contrast to India, where it is on the "G" side) and also joined issue with the Secretary of State by pointing out that that Board had no contact whatever with the Universities. Education in the Army, he urged, should stand in the same relation to the Universities as does the R.A.M.C. to the B.M.A. Mr. Lawson's statement shows that he is firmly resolved to see that education in the post-war British Army shall be a live subject, and the early formation of an Indian Army Educational Corps shows that the Indian Army, too, is determined to ensure that its soldiers are well equipped mentally for their work. Given the necessary organisation there is no doubt that the new Corps will be as successful as its forerunner in the British Army.

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UBLIC OPINION alone can change conditions and ameliorate the lot of animals". So writes a contributor to this issue, and all who love animals will admit its truth. This is a subject on which we of the Armed Forces can, if we wish, exercise a real influence—not, we would

For Animal Lovers add, because we are offenders, but because we are disciplined men who should take it as a public duty to see that this cult of kindness to animals is actively supported. It is a paradox that in a country where religious

beliefs are so bound up with the animal world, and where animals are held in such high estimation, cruelty abounds. Many of those in charge of animals do not yet seem to understand that they would get far better results from a well-kept, properly fed and rested animal than from one which is half-starved and overworked. This state of affairs is no new thing in India. In the early days of the last century incredible cruelties were perpetrated on the animals pulling the dak gharry and on other beasts of burden. India

was, however, then a backward country, and distances being so vast a campaign aimed at educating the masses was not possible. Moreover, India was fifty years behind Great Britain in introducing an Act making cruelty to animals a punishable offence. To-day India is far from being a backward country-distances have melted away with faster communications; and with wireless millions of people can be addressed simultaneously. Today, then, public opinion can be changed with much more ease than a hundred years ago, and as the Armed Forces are the biggest and most disciplined body in the country, they should by example, by speech, and by endeavour help in this worthy cause.

Societies for the prevention of cruelty to animals have existed in India for nearly a century. One was founded in Calcutta in 1861; another in

An All-India S.P.C.A.

Karachi twelve years later; while others were formed in more towns in succeeding years. Much good work was done by these and many other smaller societies, but success and permanence varied as enthusiasm waned

and transfers and departures of the leaders occurred. Evidence of this lack of continuity led one enthusiastic worker, Mrs. A. M. Lloyd (now Lady Lloyd), Honorary Secretary of the Delhi S.P.C.A., to endeavour to establish a co-ordinating body, and after much hard work on her part the All-India S.P.C.A. was founded in 1929, with its office in Calcutta. It now has some 54 Societies affiliated to it. One of the most active of them is without doubt the Delhi S.P.C.A. Inspired and led for the past twenty years by Lady Lloyd, still its hon. secretary, it is a model organisation whose admirable work has done a power of good for dumb creatures. The Society treats over 8,000 animals annually in its own hospital and branches, which include a free dispensary for animals belonging to poor people, where upwards of 2,000 outpatients are treated annually, (a figure which refers only to the first of each course of treatment); sends out each week a specially-equipped van to outlying villages to give free veterinary service to the animals there; has twelve Inspectors on cycles patrolling Delhi streets; employs farriers at the hospital forge, where about 4,000 horses and over 1,000 cattle are shod annually; has pressed successfully for the provision of shelters for tonga ponies and water troughs in New and Old Delhi; and has a first-class veterinary staff. All this has meant sustained public-spirited effort, and that Society, and other Societies throughout India, deserve a far wider measure of public support.

We are convinced that officers of the Indian Army are with us in this desire to see that cruelties to animals are lessened. Much can be done

How Officers Can Help

by individuals who, seeing an animal ill-treated, will take the trouble to report it; by joining the local S.P.C.A.; by "practising what you preach", and by showing kindly consideration to one's own pet animals and birds and by being frank, even with friends, if unconscious cruelty is being done to animals. In connection with our first point, it is well to know the best procedure, which is to take the number of the cart or tonga, the colour of the animal, the time and the place; experience has shown that if a threat is made to the driver that the case is to be reported, he often changes his horse or keeps it off the road for a few days. Send the report to the local S.P.C.A., from whom an acknowledgment will probably arrive, and from whom a report of the progress of the case will doubtless subsequently arrive. This matter of the prevention of cruelty to animals is, therefore, a public duty which falls on every citizen—soldier or civilian. Though men may protect animals from ill-treatment solely with the object of befriending the animal, yet nonetheless his kindly act makes him a better citizen. And that is what we members of the Indian Army aspire to be.

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TOO LITTLE acknowledgment was given during the inter-war years to the self-secrificing work done by numerous wives of British Officers among the sepoys' families in the Unit lines. Despite difficulties and discouragements in the early stages, their work did more than show the

A Tribute
To
Officers' Wives

women how to overcome illnesses; it also helped in no small measure towards making a "happy Regiment", and those who so willingly gave their time and energies to family welfare work in the Lines in the past have

the satisfaction of knowing that their endeavours were warmly appreciated, and have always evoked the admiration and gratitude of officers, high and low. The Commander-in-Chief, indeed, has recently expressed publicly his "sincere gratitude and admiration for the splendid work done by many devoted wives and others for the welfare of the families of Indian soldiers". Now that India is to officer its own Army, this valuable tradition will be carried on by the wives of its officers—and it is a pleasure to learn that many such ladies are taking up the work with the same enthusiasm and zeal as their predecessors. Their task is not easy, for many Indian soldiers' wives come from villages where ignorance, superstition and prejudice are rife, and the more active interest the officers' wives evince in the running of the Unit Welfare Centre, the greater will be the response from the women folk.

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It is a sphere in which the officer's wife can play a practical part, for a sepoy's wife will, after the ice has been broken, find much to discuss with

The Unit Welfare Centre her own sex. But apart from such general interest, the Unit Welfare Centre needs to be organised on a proper basis; a well trained nurse *dai*, who can supervise work in the maternity section and deal with immediate

treatment of minor ailments, is of great value, for she can also teach knitting, sewing, child welfare, elementary hygiene, etc. In some units she

is paid extra to run a kindergarten class. Here, in a friendly informal atmosphere, the officers' wives are sure of a warm welcome, and it is here that they will be to the soldiers' wives what their husbands are to the soldiers—someone in whom they can put their trust.

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A system has developed in certain stations which deserves to be more widely known. Its executive is the Station Welfare Committee, on which

all local C.Os serve, and which administers a Central Fund subscribed to by (a) The Central Maternity and The Station Welfare Child Welfare Fund, (b) Unit subscriptions, and (c) Committee private enterprise. The Committee holds itself responsible for applying for the Maternity and Child Welfare Grant for the station. All bills for the normal upkeep of Unit Welfare Centres in the Station are paid by the Committee monthly; they include such expenses as wages, extra medicines, transport, fuel, hospital fees, replacement of equipment and linen, etc. All equipment for the Unit Welfare Centres is supplied by the Station Welfare Committee, so that when a Unit is transferred, the complete Centre is ready to be taken over by the incoming Unit. Small units are affiliated to the nearest Unit Welfare Centre, so that no individual family is neglected. Unit subscriptions to the Central Fund are limited to the amount necessary to make up the amount required to cover running costs of the Centres in the Station, though, of course, each unit can expend additional monies from its own funds on its own Unit Centre.

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The Welfare General, Lieut.-General Sir Noel Beresford Peirse, has told us of his great appreciation of the efforts of those Units whose Centres

Help For Those Which Need it. have proved successful, and he is anxious to assist in every way possible the efforts of those who seek to expand the work already done. Every officer of the Indian Army well knows the immense value of this

sphere of his duties. It not only ensures a contented Unit, but raises the morale and efficiency of his men. On the other hand, it is clear from the keenness with which Indian ladies are taking up their task that they, too, appreciate its importance in the life of the Unit and its usefulness to those whose life has hitherto been lived in utterly different surroundings. From their participation in this work both officers and their wives will have cause for pride—that pride from which springs devotion, enlivened and made actual by personal energy and service.

By H. E. FIELD MARSHAL SIR CLAUDE AUCHINLECK,* G.C.B., G.C.I.E., C.S.I., D.S.O., O.B.E., A.D.C., Commander-in-Chief, India

AM going to talk about our plans for the future of the Armed Forces of India assuming that India remains within the British Commonwealth of Nations as a fully autonomous Dominion. It is, I think, necessary to make this assumption a basis of our planning, as if India does not remain a member of the Commonwealth, so many unknown and uncertain factors are brought into the problem as to make any realistic planning practically impossible.

I will assume, then, that India will remain within the Commonwealth and that she will, in consequence, be ready to help in its general defence against an aggressor, and also to rely on the aid of the other members of it, should she herself be attacked. It is then my task, helped by my advisers in Naval, General and Air Headquarters, to try to produce and maintain in peace the Armed Forces which will enable India to defend herself against the first shock of an assault, or to help any other part of the Commonwealth, which may be threatened, to do the same.

You will realise, I know, that we are rigidly limited in our planning by financial considerations, and that we have to restrict ourselves to the absolute minimum forces needed to give security, and to ensure as rapid an expansion as possible on the outbreak of war. I can assure you that to reconcile what we think is essential with what the Financial Authorities think they can give us is a most difficult business. In the end, a compromise is almost always necessary and compromise, in a matter of life and death—such as war—is always unsatisfactory. However, this conflict is, I fear, inevitable and must be accepted.

You might well ask, in view of the uncertain political situation in the country, why we are making any plans at all. What guarantee have I, or any one else for that matter, that the new national Government of India will not have quite other ideas as to the form and size of the Armed Forces it needs, and proceed to reorganize these on completely new lines? I can only say that I have **no** such guarantee. I am sure, though, that it would be wrong to stop planning for the future and just mark time. To do so would, I am certain, set up a rapid and dangerous decline in morale and efficiency, not only in the Headquarters of the Armed Forces, but in those Forces themselves.

I am afraid I am not one of those who believe that all wars have ceased. The planning and development of new weapons of war is going on at an alarming rate on all sides, and I have no doubt myself that in five years time many of our present-day weapons will be as out-of-date as the horse is to-day so far as war is concerned.

The reconstitution of an Army, or of a Navy or an Air Force for that matter, is a long and complicated business, which must extend over years, and once started, cannot easily be altered or changed. If we lag behind our potential enemies in our planning and in putting our planning into effect, we run the greatest risk of being caught unprepared. In the conditions of modern war,

^{*}In a recent address to students at the Staff College, Quetta.

to be caught unprepared at the outset may well mean immediate and total defeat, if not total extinction as a nation.

I say, therefore, that however uncertain may be the constitutional position in India to-day, we cannot afford to mark time in our plans to ensure the defence of the country. My aim is to ensure that these plans shall be adequate for their purpose, whatever form of Government or constitution may eventually be set up in India. I do not think that it is in any way impossible to plan on broad lines with this end in view.

I will now tell you briefly how far we have got in our planning.

R.I.N.—So far as the Royal Indian Navy is concerned, we hope to have a balanced, if not very large fleet, consisting of three cruisers as its nucleus, with sloops, frigates and other smaller vessels as considered necessary. The R.I.N. is a young force, which, through no fault of its own, grew up too quickly, perhaps, during the late war, though we all know how excellently it proved itself in many parts of the world and what high praise it earned from its big brother the Royal Navy. All the same, it did expand to a tremendous extent in a very short space of time.

This rate of expansion is not possible in peace-time if firm foundations are to be laid for India's navy of the future. The manning and handling of big ships is a specialised art and cannot be learned in a few days or even months. Therefore we are starting slowly, hoping thus to build firmly for future expansion. I hope we shall see the first of our cruisers in Indian waters next year, if all goes well.

R.I.A.F.— As to the Royal Indian Air Force, that too expanded very rapidly in the war years, too rapidly to allow of it being built up as it should have been, had conditions permitted, into a balanced and self-contained Force. There was a natural and very proper desire to see Indian squadrons taking their place in battle against the enemy, with the result that, when fighting ceased, we found ourselves with ten R.I.A.F. squadrons, all fighter squadrons and practically entirely officered and manned by Indians. We all know how well these squadrons fought in Burma.

Behind these squadrons, however, the R.I.A.F. had no maintenance organization of its own. There was, and still is, vast repair and maintenance organization for the upkeep of the Air Forces in India, but this is a mixed R.A.F. and R.I.A.F. organization, and depends very largely indeed on the R.A.F. for the large number of skilled technicians and artificers required, though intense efforts were and are being made to train Indians to fill these essential posts.

What we now have to do is—first, to provide the R.I.A.F. with the necessary Indian repair and maintenance units, so as to make it independent of the R.A.F. and a fully self-contained and self-supporting national force. We are therefore not going to rush ahead and form more R.I.A.F. squadrons immediately, as this would be a short-sighted and ill-balanced policy, quite out of keeping with our object.

We propose to make the existing ten squadrons into a balanced force of fighter, bomber and transport aircraft, so that our Indian airmen may become expert in flying multi-engined aircraft as well as single-engined fighters, and so that our Indian squadrons may have their own administrative backing behind them.

This will take two or three years at least. When this first stage is complete, we propose to increase the number of squadrons in the R.I.A.F. until it can take over the sole responsibility for the local defence of India. Our present plans allow for an Air Force of some twenty squadrons of all types, fighters, bombers, transport aircraft and others, so that the R.I.A.F. will have to expand to double its present strength. Our intention is that this expansion in actual squadrons shall be accompanied by the simultaneous building up of the necessary training, repair and maintenance establishments on an entirely Indian basis.

INDIAN ARMY.— The basis of our planning has been that in peace we must have the nucleus of a field army ready for use in emergency with the least possible delay. In other words, we hope to have our divisions and brigades complete, not only with their fighting units, but also, so far as is possible, with their transport, medical and other administrative services.

We hope, too, that we shall be able to keep these divisions concentrated under their own commanders and staffs, in suitable training areas, so that they can really prepare themselves for war and keep alive the divisional spirit which has grown up so strongly in the last war. Our plans include one armoured and one airborne division as well as several infantry divisions. The infantry divisions will keep the signs and numbers they had in the late war, though the units must change, of course, from time to time.

These divisions and brigades will consist entirely of units of the Indian Army; in fact this is already the case. As you know, up till now our divisions and brigades have been a mixture of British and Indian units and a very good mixture it has been, as anyone who has read the histories of the Indian Divisions of the last war will know. Coming constitutional changes make it necessary to put an end to this close partnership, and from now on our divisions and brigades will be composed solely of Indian units. I am sure that, under this new arrangement, the divisions of the Indian Army will keep up the great name they have won for themselves throughout the world.

This new policy has meant a great increase in the strength of the Royal Indian Artillery, which has now to find all the medium, field, anti-tank and anti-aircraft artillery which, at the beginning of the last war, were practically all British units. This is as it should be, and I have no doubt that the R.I.A., from their recent record in Africa and Burma, will do the work admirably.

At the moment, however, the R.I.A. is desperately short of officers, British and Indian, and there are none available in India or the United Kingdom to fill the gaps. It takes time to train an artillery officer, and I am afraid we shall have to reduce a number of units to cadre for the time being until we can get more officers trained. The same shortage of officers applies also to the Royal Indian Engineers and to the Indian Signal Corps, and more young Indian officers are very badly needed for these Corps.

In addition to our divisions and brigades of the Field Army, we shall need some Frontier Brigade Groups to help the civil authorities to keep order on our Western Frontier, and these will consist, as they have always done, of Infantry, Artillery, Sappers and Signals, with some armoured units to reinforce them if necessary. We have a big plan for the expansion of the Civil Armed Forces, that is the Scouts and Militia Corps, on the Western Frontier, so that these can more and more take over the duty of policing the tribal areas and so replace regular troops, which can then be concentrated and trained for modern war.

The North-West Frontier has been in the past, and still is in many ways, an excellent training ground for *junior* Commanders—such as section, platoon and company Commanders, and for the individual soldier, but it is not really a good training ground for an Army which may have to fight a first-class enemy in very different conditions of ground and climate. Therefore it is my aim to reduce as far as possible the number of regular troops employed in Frontier Defence duties.

In addition to the Army in India, we have still a large number of divisions and brigades of Indian troops overseas in the Middle East, Iraq, Burma and Malaya, besides our occupational troops in Japan.

These troops, except for those in Japan, are being paid for by the British Government and will eventually come back to India unless the future Government of India, whatever it may be, agrees to lend them to the British Government for garrison duties in these countries. If and when they do come back to India, they will be surplus to India's needs and will have to be disbanded. This does not mean that every individual unit overseas will be disbanded, as many of them are likely to be kept on in the post-war Army, but an equal number of troops will have to be dispensed with and these will mostly be war-raised units.

If the future Government of India wishes to retain British troops in this country, and if the British Government agrees to their being kept—and this is an important proviso—these troops will be organised in independent Brigade Groups. This process has already started, and there are at the present moment five or six such groups composed of British Infantry battalions and British Artillery regiments in various stations throughout India. This is a necessary and convenient arrangement which follows on the decision to have all-Indian Divisions and Brigades in the Field Army.

How many, if any, British units will be kept in India will be for agreement between the future Government of India and the British Government, but, as I said before, it will be primarily a matter for India to decide. It is the intention to have such British Brigade groups as may be kept in India, concentrated under their own Commanders so as to make their training and administration easy to carry out.

In addition to our divisions and brigades of the Field Army, we hope to have one Corps Headquarters with some Corps troops. This Headquarters, which will probably be located at Karachi, will have the task of planning for war and of taking command of any expeditionary force which it may be necessary to form to deal with a sudden emergency. In peace it will also have the duty of carrying out training exercises with and without troops.

As for the supply of officers, you will have heard of our plans for a National War Academy, an Indian "West Point". An excellent site has been tentatively selected on Lake Kharakvasla, near Poona, and we are now going ahead with plans to secure the land. If our future plans mature, this will be a magnificent place, fully worthy of India and of the great achievements of her fighting men in the last war.

We hope it will hold some 2,500 to 3,000 cadets, who will go through a four years course, organized on the best and most modern lines. As you know, it will train officers for all three Services and thus, I hope, lay the foundations for that close comradeship and co-operation between them which is so essential to success in war. I ask the support and help of all of you in order to make this scheme the success it deserves to become.

At the moment we are still finding it very difficult to get the right class of youth to come forward to apply for regular commissions in the Army. When the National War Academy gets going I hope this difficulty will disappear, but this cannot be for three or four years yet, as the Academy has still to be built. Meanwhile it is essential that we should begin at once to get the best young officers it is possible to procure.

You, I am sure, will be in full agreement with me in this, and here again I ask your help. You are the best missionaries the Fighting Services can have and, in your own future interests as well as those of India, I ask you to do all you can to encourage boys of courage, character and intelligence to come forward for regular commissions. As I have so often said, the quality of an Army is the quality of its officers. India has some of the finest fighting men in the world. They deserve and must have the best officers we can give them.

Before leaving this subject of the future of the Army, there are one or two domestic matters on which I might be able to tell you something. The first is on the question of accommodation in the next few years. It is clear that our policy of keeping divisions of the Field Army concentrated in good training areas will mean building a lot of new quarters for officers and men. Until these new quarters can be built, quite a large part of the Army will have to be in temporary accommodation. This may seem to some of you a little cruel after six years of hard campaigning, but it cannot be helped. We must just make the best of it, and I am glad to say that Divisions are making the best of it, as I saw the other day when I visited the 5th Division at Ranchi.

On the other hand, the reduction in the number of British troops and the concentration of Indian troops in training areas will make excellent permanent barrack accommodation available for Training Centres, Schools and administrative establishments of all sorts, and this will mean, I hope, that the general standard of accommodation for Indian troops and their families will be raised considerably. Meanwhile our Services Post-war Accommodation Committee has been hard at work in Delhi and has produced some first-class proposals on absolutely modern and up-to-date lines, which we hope to be able to put into effect.

The second question is the pay of the officer—a most important one, as I fully realise! As I see it, assuming that the constitutional changes go smoothly and by agreement, the Indian Army is likely for some time to need the services of a number of British officers in the senior and middle ranks. These officers will be replaced by Indian officers as rapidly as they can be trained and given the necessary experience to fit them to command and to hold the higher staff appointments. This process cannot be hurried too much unless you are prepared to risk a serious reduction in the efficiency of the Army as a whole. At least that is my opinion, which is shared I believe, by most of the senior Indian officers in the Army to-day.

So long as there are British officers, seconded, attached, or permanent, serving in Indian units, it will, I think, be necessary to relate the pay of Indian officers to that of these British officers. That is, the pay of both must have a common basis—a basic rate of pay for both, to which can be added overseas or any other special allowances necessary. These are the lines on which we are working.

As you know, there is an Inter-Services Pay Committee sitting in Delhi working out proposals for the future pay and terms of service for the R.I.N., I.A., and R.I.A.F. This Committee is dealing with the pay and conditions of the

Other Ranks of the three Services as well as of the officers. In fact, their big problem is the pay of the Other Ranks. Now the Government of India has also set up a Commission to enquire into the future pay and conditions of living of civilian servants of Government and labour generally. This is an enormous subject, and I have come to the conclusion that, as all these questions, whether military or civil, must really start from the basis of the cost of living, we must link up the conclusions of our Committee with those of the Pay Commission.

This means that it is unlikely that any decision will be reached before the end of the year, or perhaps for several months after it. Meanwhile, I would ask you to remember that the Government must have officers and men in its Armed Forces and knows that it will not get them unless it pays them well and offers them reasonable terms of service. I do not think there is any real cause for anxiety as to the future, though it is not likely that everyone will get what he thinks he ought to have. This never happens in my experience!

One more point in this connection is that, whatever changes may be made in the pay of officers, up or down, the position of existing holders of appointments will be protected, that is to say, an officer will not be compelled to take the new rates until he is promoted or given a new appointment.

Now a word about the uniforms of the future Army. Our Post-War Dress Committee has made its report, which I am now considering. Briefly, we shall keep the serge battle dress for cold climates, as in the last war. We are experimenting to see whether a thick bush shirt would be better than the present battle dress blouse. There is some difference of opinion about this, people from Italy having a strong liking for the blouse, while those from Burma are not so keen on it.

For hot climates we shall keep the olive green bush shirt and trousers with the short gaiters. For full dress and walking out in hot weather we hope to introduce an olive green, well-fitting tunic with closed double collar, with piping and chevrons in the regimental or Corps facing colours, and also coloured shoulder titles.

Badges of rank will be gold or silver embroidery on the shoulders. Regimental badges and buttons will be silver—boots and shoes will be black. We shall issue olive green shorts for drill and training in barracks and also I hope, denim overalls for dirty work. The general head dress for the I.A. will be the cloth beret—scarlet or drab for the Infantry, dark green for Rifle Regiments, royal blue for the Artillery, Engineers and R.I.A.S.C., dark blue for the Armoured Corps and Signals, grass green for Boys Units, maroon for Airborne troops, and so on.

In war, and during field training, the beret will be replaced by the fighting hat in olive green or the steel helmet. Sikhs, of course, will keep the pagri, which will conform in colour to the beret worn by other classes of the unit or Corps. Regimental and Corps badges will be worn by all ranks on the beret or pagri on a backing of the regimental or corps colour. In the full dress tunic regimental badges will also be worn on the collar. The peaked cap will probably disappear, except for colonels and general officers, who will keep their red bands.

For ceremonial, leather belts will be worn with the olive green tunic by officers and men.

In hot weather, mess dress will be the clive green tunic, of which the collar can be worn open and still look very smart, and trousers. For cold weather we

intend to have the blue serge jacket and trousers, with the appropriate badges and stripes, and so on. If units so wish, officers may wear the coloured flat field service cap of regimental pattern, (the side cap) with mess dress, but not on parade. This will be optional, but the pattern in any one regiment or corps must be the same throughout.

These decisions have been arrived at as a result of very complete enquiries made from all ranks of the Indian Army. We hope to get out orders on the whole subject before very long.

There is one other most important matter to which I want to draw your attention, and it is this. The new weapons of war which are now being rapidly developed in many countries, such as atom bombs, bacteriological warfare, guided projectiles and so on must, I am sure, have a most marked effect on the size and make-up of Armies in the future. At the moment our divisions are organised and equipped as they were in the last war, but I am sure that this cannot last long. I feel that all these new weapons will have the effect of making it more and more difficult to supply large armies in the field.

Enormous bases of supply and crowded roads and railways for lines of communication will not, in my opinion, be possible, in the face of the long-range, accurate attack of these new weapons. I believe this will force us to reduce the size of armies in the field, and that such armies as we may be able to maintain will have to be very highly protected, extremely mobile, very hard-hitting and self-contained to the greatest possible degree. I suggest that you might give thought to this problem. I have already instructed the General Staff at G.H.Q. to give it their urgent consideration.

There is one final point I wish to make to you. It is concerned with loyalty.

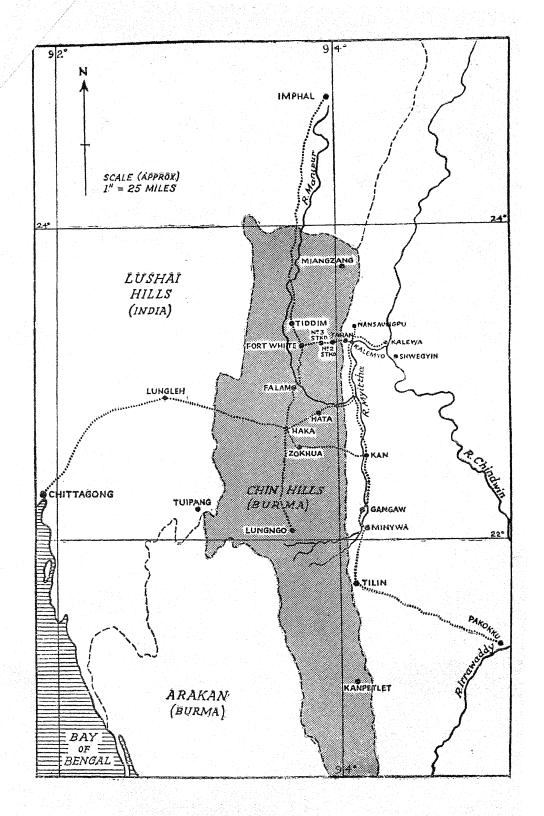
An officer is bound to be loyal to his Service and to his Country. He may hold whatever political opinions he likes, but so long as he is serving as a sailor, soldier or airman, he must not allow politics to affect his loyalty to his Service or to the Government which is in power, even if he thinks that it is not the right form of government. We all know that the political situation in India to-day is confused and the future most uncertain. I think I can say that no one knows better than I do the difficult position in which many Indian officers find themselves. I hope that the political situation may clear up in the near future and so, I am sure, do all of you, but it may not. So long as this uncertainty continues, I hope all officers will remember their duty and their loyalty, and not allow their political opinions to interfere with either of these.

If an officer feels so strongly that he cannot restrain his feelings in this matter, it is his duty to resign. I hope most sincerely that none of you will have to take such a drastic step, as the Army needs to-day all the officers it can get.

British Armed Forces, 1939-46

During the War the numbers of men of Great Britain who served between September, 1939 and May, 1946 were: Royal Navy, 964,000; Army, 3,927,000; R.A.F., 1,274,000, making a total of 6,165,000 men.

The figures for women are: W.R.N.S., 89,000; A.T.S., 315,000; W.A.A F., 223,000; Nursing services, 29,000, making a total of 656,000 women.



THREE YEARS WITH THE CHIN LEVIES*

BY H. E. W. BRAUND, M.C.

THE year 1942 was a fateful one for the whole world. For the Gangaw Valley in North-West Burma the month of May brought tragedy, to shatter for probably a decade a tranquillity that far removal from the railway and mechanized industry had apparently established as immutable. It also brought the spectre of an Imperial Army withdrawing in the face of an Oriental enemy, trained and equipped for a conception of War for which the dead hands of disarmament and appearement had disqualified us.

Kalemyo, the biggest town in the Northern end of the valley, stands at the crossing of the roads which run northwards from Pakokku on the Irrawaddy River to India, and westwards from Kalewa on the Chindwin River to the Chin Hills. Here the confusion which was the common lot became worse confounded by the merging of two streams of troops and refugees, battling their way northwards like exhausted swimmers for the surface. But here, among the chaos, might also have been found the first symptoms of method in the activities of a very small band of officers, whose preparations clearly were not directed towards withdrawal to India. Under Lieut.-Colonel (later Brigadier, D.S.O.) F. W. Haswell of the Burma Rifles, and Captain (later Major M.C.) D. E. B. Manning of the Burma Forest Service, the Western (Chin) Levies were being born.

By coolie, bullock cart and any other means of transport that could be devised, a hard-won but steady stream of rations and supplies moved westwards out of Kalemyo and across six miles of open paddy land: it was then swallowed by the jungle that was to be the dominant factor in our operations for the next two-and-a-half years, and finally unloaded five miles further on at No. 2 Stockade, of impressive name but indefensible property. Here the Chins took over. Norman Kelly, the Irish Assistant Superintendent at Tiddim, had not merely the advantage of three years service in the area, but also that invaluable quality which impels naturally the confidence and loyalty of the people. And so the villagers in their hundreds sped down to "No. 2" and toiled back again each with his sixty pound burden of rice, peas or salt.

That the Japs, after a final battle with the British rearguard at Shwegyin on the East bank of the Chindwin, then called off the chase gave us the breathing space necessary to clear "No. 2" of everything that had been put into it, including (to the ultimate salvation of the Officers, for the Army found no means of rationing us for some months) a dump of tinned foods, milk, tea, sugar, etc. which the Burmah Oil Company (of a foresight that other authorities sadly lacked) had installed there for the benefit of such of their large staff as chose this route for their trek out. In the event—and fortunately for us—very few of them did.

Thus, over Kennedy Peak's near 9,000 feet into Tiddim, or across the Manipur River suspension bridge to Falam 74 road miles distant, or thence to Haka, a further 34 miles on, and from there to outposts extending to 100 miles further South still, the rations were dispersed, and with them the motley, untrained, ill-armed and far from comprehending bands of volunteers who were the Levies, and the few Officers who were committed to the experiment of backing them against the Jap.

^{*}This article, condensed from a longer one, was written by the author in March, 1945. The second instalment will appear in our next issue.

THE CHINS

The Chins and their kindred tribes are to be found in the mountain ranges that separate India from Burma. Very sparsely scattered, they live in small closely crowded villages (averaging perhaps 200 houses) sited as far up the hill sides as the conflicting considerations of an assured water supply and a vantage point permit.

They have all the characteristics of the hillman—a warlike tradition with head hunting at its core, a clannishness that makes for an infinity of local dialects, a frail physique astonishingly belied by their feats as porters, animistic beliefs that crowd the walls of their houses with the skulls of wild and domestic animals, and a domestic economy moulded by a life lived never very far above starvation level.

Strongly bound by his family lies, loyal to his own community, dirty, litigious, suspicious of strangers, slow to accept change, a notable hunter, the Chin remains, by the very inaccessibility of his homeland, backward, uneducated, and, in consequence, blessed with freedom from the usurious petty trader, the petrol engine, venereal diseases and political rivalry.

Not unlike the better known Gurkha in form and features, the Chin is conspicuous for the differing hair styles (worn long) adopted by the men of the various tribes, while in his womenfolk—little less emancipated than himself—the length of the skirt is the most apparent distinguishing feature. Thus, in the Tiddim area the man wears his hair tied in a bun at the back of his head and his wife a knee length skirt, while to the South around Haka the man wears his bun prominently forward on his brow and his wife an ankle length skirt. Except for such as travel in the entourage of civil officers the man from Tiddim would have difficulty in making himself understood in Haka.

There are at present no strategic or commercial reasons for opening up the Chin Hills in peacetime. As certainly, therefore, as the wartime roads will revert to jungle so will the Chin be reclaimed by the self-contained parochialism from which the War so startingly roused him. In the World that we appear to be making perhaps it is as well that this should be so.

It would be giving a false impression of our isolation were no mention made of the Chin Hills Battalion of the Burma Frontier Force which, based on Falam, was still in being; or of several hundreds of Chin survivors from various units of the Burma Army who, having found their way back to the Hills from the debacle, were absorbed into the Levies. The Battalion in peacetime was probably one of the best disciplined and best turned out units in Burma, but it had not for the most part been involved in the campaign, and the universal state of morale after the withdrawal was so infectious that, but for a strong character in the C.O., Lieut.-Colonel A. C. Moore, it is at least possible that it would have disintegrated. In the circumstances it was—and rightly—kept comparatively concentrated in the Falam area and, could not be regarded as a regular backing to the bulk of the Levies' commitments. The men of the Burma Rifles certainly had the advantage of battle experience, but this, initially, was completely offset by their dejected and unenthusiastic attitude towards continued service with the Levies, an attitude only too easily appreciated by anyone with knowledge of the ineptitude and lack of foresight of which they had been the victims. Ultimately they proved themselves, but in those early days were almost as much a hindrance as a help.

Before attempting any account of what life with the Levies was like, mention must also be made of the three senior Civil Officers in the Hills, Messrs. L. B. Naylor (later C.B.E.), Deputy Commissioner at Falam, and N. W. Kelly, O.B.E.,

and J. Poo Nyo, the Assistant Superintendents respectively of the Tiddim and Haka Sub-Divisions. Welcome or otherwise, to some extent we must have appeared in the role of disturbers of their peace, but their co-operation was wholehearted; in fact for the critical period of the first eight months Naylor largely released Kelly and Poo Nyo from their civil duties and, without military rank but with none but military officers under their command, they served as "Zone" commanders of the Levies in their respective "parishes". Without this arrangement it is doubtful whether we could have recruited Levies or depended on the villagers for transport to any effective extent: and when Rupert Carey (later O.B.E.) and I relieved Poo Nyo and Kelly respectively in February 1943 we took over a going concern with the added advantage of having our predecessors in office still behind us for help and advice.

Of the "full time" Levy Officers, Haswell was the only regular among us: but with many years experience of the hill tribes of Burma he dropped the mask without an effort and made an excellent bandit chief. He was a happy choice for a strange command that for long had all the elements of a losing gamble, and his efforts did not go unrecognised. Manning, who would strongly resent any reference to his years, was nevertheless of a generation for whom an office chair in Simla or New Delhi was the natural outcome of eviction from Burma. But he forewent his claim in order to come into the Levies primarily as Supply Officer, and ultimately as jack-of-all-trades, as his M.C. indicates. James and Bankes (both later M.C.), Carpenter and Wright (both later "mentioned") were all Forest Assistants of timber firms in Burma. My civilian lot, as an Assistant of Steel Brothers, was also an up-country one on oilfields and mines.

So the "founder members", with little military training among them, nevertheless started with the overriding advantage of knowing how to live in the jungle. And yet, at the end of six months we were all of us probably prepared to admit how little we knew even of that, for those early days really were a severe test of mind and body. During nearly three years something more than fifty officers were in and out of the Levies. Some others of them will be mentioned in the pages that follow.

The break of the rains in May 1942 found us dispersed from Hiangzang in the extreme North of the Chin Hills to Lungngo, which was as far South as we ambitiously sought to dominate. On the map this is a distance of a mere 130 miles, but by road it is about 250 miles, or say three weeks marching when travelling with coolie transport. The area Eastwards from our bases (i.e. Tiddim, Falam and Haka) to the Chin Hills border is approximately 3,500 square miles on the map, or nearly 6,000 on the ground. This "to kick off with", because we later had patrols operating over 100 miles South of Lungngo. And that we by no means confined our operations to the Hills, but carried out some effective harrying of the Japs in the Kalemyo/Gangaw valley, and some conception of the area of our activities is possible.

The topography of the country is such as either to make or break you in a short time. Viewed from the valley in the open season, the Chin Hills are a successive piling up of roughly North to South ranges of forbidding aspect, the final mass rising to a steel-blue horizon at a height of 8,000 to 10,000 feet. Apart from the mule track that links Falam with Tiddim and Haka and all three with the valley, there are no paths on which two men can walk abreast for any distance—the gods' gift indeed to those who wage war by ambush! The torrents which in the rains trimble from every declivity to join the violent surges down the valleys, almost all dry up during the open season, when a full water bottle at the start of the day becomes essential.

The valleys stand thick with deciduous jungle and, despite the depredations of a race that might have sprung from Esau, are well stocked with game, among which tiger, bear, monkey and barking deer are common. The hills sweep steeply up from the very stream beds and, except where village cultivation has taken its toll, the jungle rises unbroken with it until at about 4,000 feet it meets the outpost sentinels of the pines to which, above 6,000 feet, it almost completely surrenders. The paths, over which fifteen successive pairs of boots have carried me upward of 6,000 miles, zigzag steeply, sometimes precariously, and at all times apparently endlessly, to the summits of the ridges where, with packs off and sentries out, fifteen minutes of collapse prefaces the downward plunge that wantonly throws away the height so bitterly won.

Two such climbs and descents in the course of a march may bring you at the end of the day to a village not more than twelve miles from your starting point (villages are seldom closer together); but if it has been a march of driving rain with 8,000 feet of climbing and torrents to be waded or rope-hauled across; if the leeches are out in force and your boots have lost their nails; if one of your Levies starts to fall back with malaria and his rifle and equipment have to be shared round; and if on arrival the blanket in your pack is little drier than the clothes on your back, then you'll feel, just the same, that you could not have made another mile.

The officers, of course, were dispersed far and wide over this vast area. You were lucky if you had another within two days march of your own post. In the extreme North Ted Wright went many months without a meeting, while down in the Lungngo sector David Cozens, an erstwhile chartered accountant of the B.O.C. (hardly a jungle training!) became an almost legendary figure so complete was his isolation. He later won a very well deserved M.B.E. for his performance, providing as he did one of the deepest tentacles of information into enemy-occupied Burma, with agents in the Arakan, Kanpetlet and Tilin areas.

It is easy to imagine, in the conditions described, the cynical amusement with which we used to read in our month-old copies of *The Statesman* advertisements from such as "twelve members of a lonely—mess on the borders of Assam appeal for the gift of a piano", or, better still, a railing against a once-weekly change at the only local cinema as a fate to be contended with! Nothing, on the other hand, caused more disgust than the grossly misinformed articles on the Chin Levies that were suffered to appear in print, written for the most part by such as having "penetrated" as far as Corps Headquarters at Imphal had the story "straight off the ice" from a mule company commander just back from twelve hours in Tiddim, and possibly a meal with the Levy Supply Officer there.

The straw to break the camel's back, however, was an article published by our own Government of Burma within a month or two of our third anniversary, according to which regular troops "took the full force of the front line fighting—while the Levies gave every support from the rear. These provided labour for porterage and road and camp building"! Had the writer of the slander shared the lot of a Levy Officer, the only regular troops he would have seen in front of him, and at times behind him, would have been the men of the 33rd Japanese Infantry Division!

It was one of our biggest handicaps that our outposts had to operate without W/T sets for over two years. Had Cozens had a set at this time the commanders of the ill-starred venture in Arakan in 1942-43 would have had ample warning of the move of a Japanese battalion overland from the Irrawaddy through the Kanpetlet hill tracts to Arakan, since Cozens was in touch with the move all

along. In the event the arrival of this battalion on the flank of our forces in Arakan came as a complete surprise, and was a decisive factor in the failure of that campaign. Our trouble was not so much shortage of equipment as an almost complete lack of liaison from India, where ignorance of the area and scope of our operations was profound.

In July 1942 the barely working Levy mechanism was subjected to its first strain. The Japs, who after the Shwegyin battle had made no further offensive move beyond occupying Kalewa some miles upstream on the opposite (i.e., West) bank of the Chindwin, put a company of 150 troops into Kalemyo. With them was a senior officer, one Yamata, who, signing himself (if I remember rightly) "Officer commanding the Nipponese Western Army for attacking the Chin Hills", started sending to us by various ways and means threatening letters setting out the dire measures he was about to undertake against us, and calling on the Chins to revolt against British rule and their Levy Officers. (Some of these letters have been published in a book called "Wingate's Phantom Army"). At the same time the Japs set prices on the heads of Levy and Battalion Officers, in some cases by name.

At the time I was camped in thick jungle near Natchaung, outside the Chin Hills and 15 miles from Ka'emyo, with a force of fifty Levies and the task of covering large convoys of villagers who were coming down daily to clear a dump of several thousand bags of rice and peas that we had brought in situ for the Levy larder. Luckily all but about 400 bags of this had been removed when the first of the threatening missives arrived. I say luckily, because having called together my Levies and read out the letter to them in the assumed spirit of sharing a good joke, half of them then took advantage of darkness and my absence (in an ambush position covering a 'land mine' comprising a five-pound tin of Kraft cheese filled with rubble and explosive) to desert! Needless to say the enthusiasm of the villagers for getting away the remaining bags evaporated, and I was left to abandon them and march the dispirited survivors of my band back into the Hills.

Followed the first of my three visits to Levy H.Q. at Falam in almost as many years, and a lightning move to No. 3 Stockade on the Kalemyo/Fort White road to reinforce the efforts of Norman Kelly and Peter Bankes of the Levies, and Jack ("Wild") Oats (later M.C.) of the Battalion to stop the rot started by the threat of a renewed Japanese advance. We touched bottom when a deputation of the local chiefs presented to Kelly a request to the effect that, since we were too few to be effective and such resistance as we might offer would undoubtedly incur reprisals against their villages, we should remove ourselves to India immediately. They, for their part, would provide every officer with an escort to see him out.

This was a nasty one! Fortunately, however, the Chin provides his own remedy for all occasions of gloom. By slaughtering a couple of mythun (a local breed of cattle, of magnificent proportions but maintained for none but sacrificial purposes) and broaching many pots of zu (the local rice beer, of no mean potency), as many as possible of the Levies were summoned to partake. By dawn, far gone in our cups, we had all so mutually assured ourselves of our tiger-like qualities that the danger was past and the fight was on. In all our subsequent ups and downs that occasion remains for me the "Tattenham Corner" of our history, and we should never have made it without Kelly's influence.

A few days later we produced the first shot from our locker when the bombing of Kalemyo by a squadron of Blenheims provided the Chins with evidence that the forces of the "Asoya" (government) had called a halt somewhere or other.

The occasion was improved by our having been notified of the bombing in advance, so there was a touch of apparent magic in our ability to tell the Levies what to expect and when; while at No. 3 Stockade a lucky spell of fine weather provided a grandstand view of the actual bombing. A repeat performance the next day resulted, unfortunately, in one of the Blenheims crashing near "No. 3". The three wounded members of the crew have reason to remember with gratitude the Levy patrol under an English-speaking ex-schoolmaster which brought them in, since they assumed the approaching Levies to be Japs and were painfully crawling away from their burnt-out plane until hailed in English and brought in on stretchers.

In October came another, and major, piece of self-advertisement—our first issue of rations in five months, and by air at that! The drop took place at Tiddim, and since air supply became henceforth such an integral part of Allied operations in Burma, it is of interest to record (though the claim is open to correction) that this was probably the first drop in Burma on the new familiar pattern. The impression it made on the Chins can better be imagined than described.

Since the inauguration of air supply made possible the obtaining of arms and equipment, it is as well to describe the conditions under which the Levies had been patrolling, raiding and holding ambush positions in the preceding five months of more or less continuous rain. The men of the Burma Rifles nearly all had their arms (the Chin's concept of the prestige conferred by the carrying of a firearm in his own Hills is such that he would be in extremis indeed who got home from worst possible military disaster without it!).

The "A" Levies, as the recruited villagers were called to distinguish them from the regulars, had possibly ten per cent of rifles among them. The rest were armed with flintlocks of fantastic antiquity and history, passed down from father to son for generations, kept in good condition by the Chin's passion for hunting, and now brought out for use against a modern enemy. It is probably a unique boast that I, and other Levy Officers, manned ambush positions against the Japanese in the late war, relying for a fair proportion of our fire power on weapons made before Waterloo! To test out the possibilities of rapid fire with these flintlocks, Peter Bankes and I carried out one day a test which showed that in optimum conditions you could be back at the aim in just under sixty seconds after firing your first shot. To describe one's tactics in these conditions as hit and run is inadequately to stress the "run".

The standard of clothing rivalled that of the arms. Nobody (speaking for my sector) had a change of clothing. Probably nobody owned a hat, shirt, shorts, socks and boots. Gunny bag, with holes cut for arms or legs according as to whether they were doing duty as shirts or shorts, were a common feature. There were practically no capes or groundsheets. There was any amount of rain. In order to clean the rifles and flintlocks a pig had to be bought and killed at regular intervals and the fat issued in lieu of oil. In these conditions the Levies regularly patrolled distances that involved sleeping in the jungle with the leeches for company. On return to Sector H.Q. my "drill" used to be to get every man stripped naked round a large fire until his clothes had dried, drinking the while a mug of hot water, since at this stage there was no tea, milk or sugar. On one such occasion one of my Levies who started the day a fit man died of exposure before reaching camp in conditions that had me badly scared on account of my own skin.

October 1942 also saw the first probe into the Hills by the Japs. Haka was the Zone thus honoured, and the enemy force was reckoned to number nearly

500. James, with less than a tenth of this number, got the information in good time, thanks to his Intelligence network, and was into an ambush position some miles forward of his camp before the Japs arrived. The latter, either because their information was inaccurate or because they counted on the Levies throwing in their hand in the face of such numbers, came up the road like a football crowd, without scouts or any apparent precautions, and making any amount of noise. They were ambushed at short range at a point where the road crosses a narrow saddle linking two hills. The slopes on either side of the road were steep in any case, but in addition they had been thickly sown with small and very sharp bamboo stakes (panjies) so that anybody trying to escape down them would be taken care of. The fire power included a Bren in a perfect position of enfilade, and about fifty casualties were inflicted in a few minutes.

In accordance with their role the Levies withdrew in the face of counterfire as soon as the Japs had recovered from the surprise, but, despite wild rumours
for several days that the Japs had switched over to another track and were still
moving on Haka (where there was great consternation in consequence!), it seems
certain now that they called off their venture at the scene of the ambush. This
action had results vital far beyond the infliction of heavy casualties because, as
in the Tiddim Zone at the same period, morale was at so low an ebb that patrolling
was at times limited by the numbers of Levies who could be cajoled into going
out! As soon, however, as it was generally realized that a very large force of
an "invincible" enemy had been sent packing by a band of untrained villagers,
tails went up all round and the Levies were starting to find themselves.

Christmas Eve brought me my first success in the shape of a raid on the Jap-occupied village of Tahan near Kalemyo, carried out in conjunction with "Wild" Oats of the Battalion and a platoon of his chaps. We pulled off a complete surprise for, a single sentry excepted, not a Jap in the place was armed when we opened up on them. Here again we pulled out as soon as they started to get on terms with us, only to be shot at by a patrolling Lysander on our way home. Luckily it did us no more harm than the Japs had done. They were later reported as having cremated twelve dead that night.

A few days later Peter Bankes carried out a splendid night raid on the village of Nansaungpu, also near Kalemyo. He raced his platoon, armed with bamboo torches, down the track through the village, setting fire to the houses as he went: then, taking up a position at the end of the village, he shot up the Japs as they left the burning houses. He succeeded in taking alive what would have, been our first Jap prisoner, but unfortunately the man was shot on the way back to camp in an attempt to escape. The three actions thus described cost us one wounded man in casualties.

Now the Chin Hills were coming into the news. In January 1943 a company of the 5th Royal Gurkha Rifles arrived in the Tiddim Zone as advance party to their Battalion and by the end of May, to their Brigade. At the same time Haswell relinquished his command of the Levies in order to take over that of the Chin Hills Area, a new appointment. He was succeeded in the command of the Levies by Lieut.-Colonel F. O'N. Ford, another officer known to many of us, and popularly to many more in pre-war Burma as "The Assassin". He was a most active individual, and during his stay became known to a lot of the Levies in their outposts. At this time, also, the Civil Zone commanders were succeeded by military officers, Carey and myself, as with the prospect of closer contact with the Army, our "set up" hitherto was clearly to raise difficulties.

The hot weather of March/May 1943 had, militarily, all the properties of a gathering storm. Jap strength in the Kalewa/Kalemyo area increased considerably, and reports of stores moving up the Chindwin were persistent. Towards the end of May, a day or two before the rains broke, they launched their expected attack against No. 3 Stockade in battalion strength and occupied it after driving out the two companies of the 5th Gurkhas and three platoons of Levies, under Peter Bankes, which had held it. From this point on, operations in the Tiddim Zone became primarily a military responsibility, though until the Jap offensive in March 1944, which overran the countryside as far as Imphal in India, the Levies, notably under Jimmy Carpenter and David Mitchell, continued to maintain a precarious hold on their posts to South and North of the lost "No. 3" and to be the main source of information for the regular forces, which increased gradually to Division strength.

Towards the end of that same May, "The Assassin", who was a Kachin rather than a Chin expert, was transferred to the command of the Kachin Levies, who were then operating North of Myitkyina in the Fort Hertz/Sumprabum areas. His successor was Lieut.-Colonel L. B. ("Cultivated") Oatts of the H. L. I. (an apposite touch this, since he was soon to find his command decidedly Highland, Light and Infantry!). Like his predecessors he had some previous experience of Burma, but it was hardly an auspicious time to take over command of the As the months previous to his arrival had seen an influx of much new officer blood, it is of interest in the light of their diverse peacetime occupations to introduce some of them: J. H. Gemmell (later M.C.), a tea planter from Assam; Dick Rees (later M.C.), an embryo physical training instructor from Wales; George Lewis, a petroleum geologist; David Mitchell, an Oxford don; J. B. Watson, a motor car salesman; Sam Cope, Dick Lewin and Bryan Smyth, Burma teak "wallahs"; Willie Grieve, a merchant from China; "Joe" Byrne, a Shan adopted in infancy by Irish parents; Pat Rathborn, of the Burma Civil Service and an exrunning blue; Ian Hills, from an office in Scotland; and Bernard Johnstone, a Rangoon lawyer (later to die of blackwater on the Chindwin).

Came for me in June 1943 six weeks leave in India which, with how much exaggeration I don't know, I nevertheless felt saved my sanity. On my return to the Hills I found, and never regretted in the light of the deteriorating state of affairs in the Tiddim Zone, that Rupert Carey and I had exchanged pitches and that I was bound for Haka. Rupert was already in Tiddim with Peter Bankes and Philip Barton, of the Burma Frontier Service who, without military rank, had rendered and was further to render yeoman service in the cause of the Levies. We had a memorable party before I moved on, but it was the last time I saw Peter alive, for a few months later, when he himself was newly back from leave, he was tragically murdered by a renegade among his own men, who then deserted to the enemy-occupied valley.

To the credit of the Chins be it said that their sustained loyalty and friendliness towards us placed an act of this sort right outside the bounds of what one imagined as credible: but it makes his loss no less a tragedy. Peter was a giant of a man, and had been a pillar of the Oxford boat for three years before he came out to Burma, where I had only once met him in pre-Levy days. In the Hills we saw a lot of each other in a variety of circumstances, and I had come to count him a friend of the greatest worth. A son was born to his wife in India some months after his death; nor did he live to know that his raid on Nansaungpu had won him the M. C.

The second instalment of his article will appear in our next issue.

IS SCIENTIFIC SELECTION SUCCESSFUL?

BY LIEUT.-COLONEL RAJENDRA SINGH.

THE answer to this problem must be given in relationship with the over all object of NATIONALISATION or INDIANISATION of the armed forces.

After all, what's in a name? Nothing; if one does not understand it or does not care to find out the significance. To some "Nationalisation" and "Indianisation" would mean one and the same thing, while to others the two words may mean nothing because they are not interested. Those who are interested must appreciate the difference between the two conversions: one deals with the body and its spirit while the other only with its part. This change in nomenclature, if it is not to be a change in name, is in the spirit of the changes now taking place in all spheres of political life of this country.

Leaders of all parties and shades of opinion have declared that India needs and must have powerful Armed Forces to defend her freedom. The non-violence of the Gandhian type is a political weapon for home consumption. The Armed Forces, if they have to achieve their purpose, must be efficient and ready like a sharp and powerful weapon. The State must lay down the policy and the Forces must carry it out. In the shape of things to come, the National Army of India must be primarily for the defence of that country.

What is to be the basis of these Forces? Have we to build on foundations which already exist or to start from the beginning? The answer depends mainly on the process by which India attains her freedom. If political power on transfer is carried on according to the old system, the present Forces must form the nucleus of the Army of the future. Even the Red Army after the revolution was based on the foundations of the Czarist Army. According to this process nationalisation will only mean the conversion of the spirit.

NATIONALISATION

The spirit of the Army emanates from the State. Some confuse this spirit with the political and patriotic motives of the individual. This is wrong. The Forces as an instrument should be beyond politics. The individuals may be politically conscious and aware of their patriotic duty. Those who want to introduce politics and communalism will have only themselves to blame if they find the sword blunt and corroded when they draw it for action.

Political influence in the Forces has never helped any State in the achievement of its aim—the advancement of the country. It has always proved to the contrary. "Beneath all the disorders that become more and more frequent among the soldiers the commander can discern the hands of politicians, against whom he can obtain no redress." Thus wrote Pache, the French Minister of War to the Prime Minister when many units mutinied and went over to the Austrians, resulting in the downfall of France.

The Russians also toyed with the idea of Political Commissars in the units. There were some good ones who may have infused the correct spirit amongst the ranks, but mostly they exploited their position and possibly terrorised the military commanders, assuming control of operations without accepting responsibility. After the debacle in Finland the Russians learnt their lesson and did away with this interference.

Some consider that the spirit of the Forces depends on the motives of the individual. This may be true to some extent, but the corporate spirit of the Army must be based on discipline, morale and efficiency. Some do not understand the functions of the Forces, and consider that as a political instrument they should be used in the attainment of freedom. It is only during a revolution, when the authority of the Government is broken, that the indisciplined army takes political sides.

Armed forces must always be prepared for sacrifices. The Indian Army fought for certain principles, made sacrifices for their preservation, and added an illustrious halo to the glory of Indian arms. One thing it did not do. It did not become rich at the expense of the sacrifices of others and then sling mud on them. The Caravan passes on. The world knows and respects the valour of the Indian soldier. He has been India's best ambassador. If freedom to India comes through peaceful means, India has to thank the Indian Army, which made it possible. A military soldier is not judged by his political fervour, personal motives or party leanings but by his military qualities.

In India we have first-class fighting material and its proper use in future will depend on the attitude of the political leaders of to-day. The germs of indiscipline once sown are difficult to eradicate. They keep on spreading. To day mutiny may be for freedom, to-morrow that freedom may take the shape of Pakistan and later on the achievement of a particular "ISM". The criticism of the Forces is only a passing phase, and once the political situation is stabilised the very critics will become its greatest admirers. We should not worry about admiration, but for the creation of efficient Armed Forces.

The efficiency of the Army depends on the quality of its officers and the discipline of its ranks. They must be permeated with toughness, high sense of duty and morale. Many people confuse motives with morale. While the first is generally personal, the latter is collective. Is high morale based on the virtue of the cause? Not exactly.

The Rajputs fought as well for their freedom against the Muslim invaders as under them. Cromwell's Ironsides fought as well as the British troops in Dunkirk. Napoleon's Imperial Army fought for foreign conquests with the same efficiency as the Frenchmen of the Revolutionary War. did for liberty, fraternity and equality. The high quality of an army does not depend on momentary impulses, but on something fundamental. The men must be imbued with the spirit to fight till the last, like the heroes of "Saraghari". This inward spiritual urge must be an inherent quality born out of tradition, loyalty and discipling and not on propaganda or political dogma, which is bound to waver according to the fortunes of the political party. The introduction of controversial theories will lessen the faith of the soldier in himself and his leaders. The Army will either become a doubtful entity or a political machine. Both are undesirable.

When our system is overhauled or reconstructed we must not forget the value of tradition. The soldier must have something to fall back upon. The pride of association with a great past is the bed-rock of tattered battalions when they are faced with heavy odds. Every unit is proud of a gallant record and this should be carried forward in the new form. It will give the soldier the inspiration that he desires to remain steadfast.

Field Marshal Lord Wavell in his article "The Good Soldier" said: "The essential qualities remain constant. When writing of Generals I put robustness as the first quality. Similarly for the private soldier I rate toughness, endurance, as the prime requirements." The Indian soldier has both these qualities, partly

inherited and partly produced by training. The inner core of the Indian masses is very strong; it can stand the greatest hardship. "Men and soldiers are convertible terms" says Von der Goltz. The conversion depends on the officers.

"The quality of an Army is the quality of its officers," said Field Marshal Auchinleck.... Not only the quality but the control of the Forces rests in their hands. The politicians have always been critical of this control, because it is in the hands of British officers. They consider their replacement as the panacea of all ills. This has been termed Indianisation.

INDIANISATION

The problem has two main aspects, the quantity and quality of the Indian officers. The politicians have always demanded accleration, while those in control have expressed their inability to accelerate owing to the paucity of candidates with quality. Both these requirements have essential importance and are relative.

Indianised forces will require about 12,000 officers. It will require a yearly turnover of more than 600 to replace only the wastages. If the initial requirement is spread over a period of time, the recurring demand must correspondingly increase and will be in the neighbourhood of 1,000. The quantity presents many problems. The first is the replacement of senior officers. Though merit should have nothing to do with seniority, we cannot ignore the fact that to a great extent it depends on experience, which is the result of circumstances and time.

The great Generals who led the French Republican forces from 1793, had nearly all risen to commander's rank at one bound. "Jourdan, who commanded a battalion in 1792, was thirty-two when Fleurus was fought. Pichegru, who started as an N.C.O., was thirty-three at the time of Wissembourgh. Marceau, who was a corporal in a line regiment at the beginning of the campaign, commanded a division when he met his death at the age of twenty-seven. Moreau, a notary's clerk, was commanding an army when he was thirty-three, while Eleber, an architect in peacetime was thirty-nine when he commanded a division." If Frenchmen did it Indians can do it. They have done it in the past, and given the circumstances they will do it again.

Without going into the abstract, we will accept the belief that for peacetime promotion both merit and seniority are essential. The Indians of fair seniority and proved merit should be given accelerated promotion. This will of course mean the retirement of those senior officers who have reached the age limit, the reduction of age limit for promotion, and the passing over of some British officers not for inefficiency but in the interest of Indianisation.

The stabilisation of the junior officers is the more serious problem, because it not only effects the present but the immediate future. The greater the number of junior Indian officers the better would be the selection for the senior ranks. In India to-day we have the material. It may not be all first class but "to build the edifice, a certain number of inferior matter, or even rubbish, has to be mixed with the finest material in the country. War has the virtue of ennobling even the vilest" says General De Gaulle.

But our Selection Boards even seem to mistrust the officers who have been through fire and the worst conditions of war. It seems ironical that we have have to select men for the jobs in which they have already proved successful. This could only be necessary if there was more supply than demand, as in England. The same solutions cannot be applied in two diametrically opposite circumstances.

The procurement of new officers to maintain the quota for the Forces is essential. It has two aspects, to complete the present requirements and to maintain a constant flow of good quality cand dates. The general criticism has been that under the pretext of quality we have deliberately ignored the quantity. The opposite argument that quality is paramount and that the "right type" of candidates are not coming forward has been constantly voiced since the inception of Indianisation. What is meant by the right type? What are the criteria of the right type? Who decides this?

The crucial question is what constitutes the right type. Many books have been written about this subject, but none have yet evolved a formula by which success can be predetermined. Nothing succeeds like success; therefore the right type should make a successful officer. What is a successful officer? Success has many forms and must also be comparative. Unless we are looking for supermen, who would be successful in whatever they touch, we must determine that "certain" officer who makes the average, or better, who is not a failure. Even then it remains a vague definition, because so much depends on circumstances, which are difficult to predict. In a limited way we can determine the relative value of candidates in relation to a certain average.

The question of supply and demand must be dealt simultaneously. It can be solved by:

- (a) the selection of those who have the quality,
- (b) training of those who can make the standard,
- (c) procurement of fresh blood.

The first two envisage the selection from the available material, and the last from what can be created and made available in future. All these problems must be solved by a composite Department which will be responsible for both quantity and quality. Separate the two, and the quantity will suffer. It will be like the Finance Department who only worry about the finance and not the result. "We want the best officers for the Regular forces. We are not interested in numbers," said the President of a Selection Board. The public is interested in the result and not on the relative merits of doctrines.

SELECTION OF OFFICERS

General Moore in his illuminating article* "Scientific Selection or Personal Prejudice" says that there are only two forms of selection: (i) examination and personal interview, and (ii) scientific selection. The object of both the systems must remain the same, the selection of the "certain" number of candidates of a "certain" type from the given mass of a "certain" quality. All the three "certains" are interrelated. If the mass is not available, the selection must be limited, and if the quality is undefined the quantity will suffer. Thus the selection produces—

- (a) the question of numbers,
- (b) the maintenance of quality,
- (c) the creation of mass.

We have already dealt with the quantity. The quality is judged by the G.H.O. Selection Boards. It has to be further divided into two parts, the selection

^{*}April, 1946 issue of this "Journal".

of Emergency Commissioned officers for permanent commission and the selection of the new blood.

The greater the number of candidates the better would be the selection, for there will be more to pick from. If the numbers are not forthcoming the mass must be created. To quote General Moore: "In England, first experiments in Army Selection started in 1941. By then, all traditional sources of officer material had dried up; about 20,000 more officers were required in the next twelve months." They were produced. The Selection Boards were the means and not an end.

In India for some unknown reason the process was reversed. To quote General Moore again: "By 1943, India had learnt how ill-advised interview boards had been in their selection of officers, by the high rate of failures among the Emergency Commissioned officers." It was, as General Moore admits, to eliminate the failures and not to increase the number of Indian officers that the Selection Boards were started in India.

To increase the quantity and to maintain the quality we must have greater mass. Here again arise two problems: (i) there may be a mass but not of good quality, (ii) the elements may not be available to form the mass. The first requires the improvement of quality in a certain body, while the other deals with its creation. It will take a long time to produce either. I will deal with these problems jointly in "The means to get better candidates"; here I will confine myself to the selection of candidates from the available mass.

G. H. Q. SELECTION BOARDS

This is not a criticism of the system but a review in relationship with the above observations. "The task of the G. H. Q. Selection Boards is to collect evidence about a candidate's past and present performance, and to review its relevance towards predicting his future potentiality as an officer", says General Moore. The one ambiguous statement: "prediction of future potentiality" requires clarification. No system has yet been invented which can be called scientific and which can prove by any law of equation that a certain type of person will always succeed. After all, our present system is only in its infancy, and we cannot claim that it has succeeded already. The experience may prove to the contrary. Even great horse-race owners cannot claim complete success for their system of selection,—and selection of thoroughbreds is far more advanced than the selection of human beings. The race-horse is trained from the cradle to be successful in the future, but often loses to an outsider.

If we base our judgment only on the analysis of the past and present event it is bound to be arbitrary, because the interpretation of the past and the value of the present are both dependent on non-recurring contingencies. The prediction of the future can only be for a limited period, and that also depends on chance. When we back a horse we not only see the form of the horse but also of the rider. Perhaps the Selection Boards do not trust the senior officers, who after all are going to run the show. There is already a great deal of controversy about who is the better judge of an officer potentiality—the commanding officer who has known the officer for years, or the Selection Boards who know them for three days. I am not going to dabble in this controversy, but must point out that the present system of selection is only an art and can be improved.

The quality of an art depends on the quality of the artist, and that rests on his training, experience, merit and success. There lies the weakness of the

Selection Boards. Not many members of these Selection Boards can by any stretch of imagination be called "The artists of selection". While General Moore condemns personal prejudices in the selection of the candidates, he is silent about the selection of the members of the boards who are going to select them.

"The members of the board submerge their personality" said an enthusiastic member of the board. How many can do that? The introduction of the personality of the selector invariably brings in the question of personal prejudices. "But we have five opinions against one" persisted the young Group Testing Officer. Quite true, but it depends on their value. The candidate is examined, observed or tested by four members of this Board, the President or the Vice-President, the G.T.O., the Psychologist and the Psychiatrist. We will consider the last two first because they are the specialists, and it is claimed that their method is scientific.

To be specialists they must not only have considerable theoretical experience of the art or science, but must have some practical success. General Moore admits that "visiting boards from the War Office are without Psychiatrists or Psychologists, because men of the required calibre and experience are not forthcoming." If we do not have good specialists in India, the opinion of the two members is not worth their salt, and the board is reduced to two personalities.

Only one of those can claim to have better experience and judgment than the Commanding Officer, that is the President or the Vice-President. He may have considerable experience of peace and wartime soldiering, and also know something about the influences of training and circumstances on the future potentiality. The G.T.O. is generally very young and has only a limited experience. One opinion is as good as the other, and for the grant of permanent commissions the Boards should only examine those E.C.Os who have either been graded doubtful, or not recommended by their Commanding Officers.

For the selection of new candidates the Boards require considerable improvement in their set-up and technique. It is not possible here to go into the details, but I will only point out a few.

(i) The selection of officers for the Selection Boards.—The President must be responsible for both quantity and quality. He should preferably be an Indian with active service and training experience.

The Vice-President should be of the same calibre, as he has to deputise for the President. Only one of the above two must interview the candidates, the other acting as an impartial "Speaker" to give his final ruling after hearing the arguments of all the members.

The Group Testing Officers must be regular officers with peace, war and training experience.

The Psychologists and Psychiatrists must be expert, and if not available be replaced by two other senior members. It is more dangerous to have a quack than not to have one at all.

(ii) Personal prejudices of the selectors must be removed.—These are difficult to eradicate, because human beings will always remain human beings. But if four members of the Board work independently and record their individual opinions, the personal prejudices of one will be counterbalanced by the other.

Every member of the Board must test the candidate independently, and his views should have equal value when compared with the other.

No member of the Board should know about the identity of the person or to what creed or religion he belongs (this, of course, may be impossible for the Sikhs). The candidate should be known by a code letter.

For each test the candidate must have a different number. The key of the code should be kept by the "Speaker", who should correlate the gradings given by different members of the Board.

- (iii) The adoption of the system to suit conditions:
- (a) The removal of the fear of examination.
- (b) Variation of the intelligence tests.
- (c) Spacing of the written tests over a period of time.
- (d) Improvement of group testing. It is true that "in every social group, each member tends to find his own appropriate level and special position in the group," and also that "every coherent group does, inevitably, throw up a leader or leaders." The most important factor in their evolution is the factor of time.
- (e) At present a group of 8-10 candidates is taken by one G.T.O. He puts the group through six tests. He has not only to form his opinion about an individual, but also his relationship with the other members. He has to compare this performance with the average at the back of his mind. I will not discuss the average on which he is working, but would point out that in addition to the above jobs he has to look for the participation, dominance, acceptibility and competence of the candidates. Each of these qualities wants careful watching and recording. The G.T.O. has neither the time nor the scientific technique to observe and record observations. This can be worked out.

I want to emphasise again that the "Selection Boards" are the best means of selection according to present requirements but they are the means and not the end. And they can be improved. They will not be criticised so vehemently if they produce the goods. For this they want suitable candidates.

THE MEANS TO GET BETTER CANDIDATES

Either good candidates are available and are not coming forward, or they are not available in the market. If the first assumption is the difficulty, we must deal with the means to attract these candidates; if the second assumption is correct, we must create them.

There are some handicaps which may be keeping back candidates of the right calibre. The most important is the attitude of parents. They have fallacious ideas about the Armed Forces. They visualise innumerable hardships for their children, and consider them "lost" once they join the Army. Young men with patriotic motives do not come forward to join the Forces; they consider the army mercenary. But most of them have no idea of Army life, and consider it either an easy "get-away" from studies, or a means of cheap "show off."

To remove these impressions a "publicity body" should be formed. The present propaganda requires new life and orientation. We must make a direct approach to the youth on patriotic motives. They may break away from tradition and force the hands of the parents.

Referring back to the French Army, which has been through many vicissitudes of life, we find how great were their efforts to discover and explore new fields for leaders. "The king employed the same empirical methods in his choice of his officers. The nobility had a taste for and the tradition of war. Its members were accustomed by social circumstances to command. The custom whereby the family property and responsibilities passed to the eldest son tended to drive the younger sons into the army." This was Louis XIV, but when Napoleon wanted more officers for his Imperial Army "the Emperor founded schools like Fountainebleau, Saint-Cyr, Metz and Chalons," ("France and her Army").

Necessity is the mother of invention. Though we have long felt the need of a system by which better candidates should be produced we have never made its realisation possible. If the future of the person depends on his past and present, it is necessary for us to arrange that circumstances and conditions for good development are available in the present. In this, upbringing and

education are the most important.

The Indian National War Memorial Academy will be a milestone in the solution of this problem, but we will require many feeder institutions to keep up the flow into the Academy. We require an overhaul of the present system of training and education in existing schools, and the creation of others.

To have a clear perspective of the whole problem it is essential that all aspects should be dealt with by one single branch in G.H.Q. Nationalisation or Indianisation of the Indian Armed Forces will remain a burning problem until

it is tackled with determination and foresight.

SCIENTIFIC (?) SELECTION

By "LICTOR."

DURING the 1914-1918 war thousands and thousands of civilians joined the Army, either voluntarily or compulsorily. Many found in the Army much of which they were critical. However, they performed their duties to the best of their abilities (in most cases at any rate), and returned to civil life at the end of the war.

The years between World War I and World War II saw much criticism of those who had served in the former. They were often represented as fools, adulterers, place-seekers and goodness knows what. This kind of criticism was easy to sell in the 1920s, when the public mentality appeared to have sunk to that of a child of fifteen. Since then there has been a considerable awakening, but some doctrines current in those years remain unassailed. One is that business men in civil life are superior in ability and intelligence to those who made the Army their profession. A moment's reflection will show the foolishness of this idea. During the Industrial Revolution Britain gained a considerable lead over all other countries. It was due to two reasons. One was that the new inventions which made the economic revolution possible were British. For an unimaginative people the British are astoundingly good inventors—a fact repeatedly demonstrated in 1939-45.

The second reason was that the Industrial Revolution coincided with great Imperial advances, and the businessman was, under the protection of the forces of the Crown, able to find new, untapped and safe markets for the sale of the

A letter on the subject of Selection Boards is included in our "Letter to the Editor" feature on page 472.

goods which the inventor had shown him how to produce. Most markets of the world were his. The Fighting Services kept him and his commerce free during the Napoleonic wars, and he flourished like the green bay tree, or the modern American.

In due course competitors arose in other countries. They used the same machinery as he did, and used better methods of salesmanship and marketing. It was a problem for the British businessman. The scientist, appalled at the world results of the Industrial Revolution, had turned his attention to other inventions. The Fighting Services could scarcely be expected to peddle socks and things about the place, though the Navy was on occasion used as a sea-faring sandwich-man. The businessman had to solve this one for himself, and he failed. He still, however, kept the prestige which others had made for him.

In any democracy it is only necessary to announce with pomposity and repetition that anything flattering to Demos is a fact to have it enthusiastically accepted. For example, about four years ago the then Vice-President of the U.S.A. finding himself in a world completely dominated by Churchill, Roosevelt, Stalin, Hitler, Mussolini and a narrow Japanese military oligarchy made the astonishing announcement that this was the century of the common man. The blind led the blind and the phrase gained currencyall over the world. So, then, did the businessman, unable any longer to pretend that he was in any way superior to those of other nations, take comfort in trumpeting his superiority to the military mind.

The military mind is frequently regarded as being impervious to new ideas. True, many a military commander has been as reluctant to adopt new methods as, say, a cotton manufacturer has been to instal new machinery. But one fact that must impress any student of mi itary history is that the military mind is about as quick as any other to seize on a new idea, but frequently selects the wrong one. So, of course, does the civil mind.

In both cases the mistake arises through not asking the question: "What am I trying to do?", or, in the stilted jargon of the Training Manuals, not having made a correct appreciation. An ou standing case of this was to be seen in the article in the April issue entitled: "Selection or Personal Prejudice." The article sought to defend the present system of selecting Regular officers by the various interviewing boards located in India—a system based on methods used by businessmen in selecting their employees.

It admitted that selection was unpopular. It listed the chief critics as:
(a) Candidates who have been given low gradings and their relations; (b) C. Os who have had their pet officers turned down; (c) those who seek privilege through nepotism or hereditary right; and (d) that large band of officers who do not understand what scientific selection means and are too busy to study it.

- (a) is probably right enough,
- (b) requires modification, which I will explain later.
- (c) I have never met any, so cannot say.
- (d) I have never met a Brigadier or above who adversely criticised these Boards.

Let us examine (b) more closely. As far as I have been able to ascertain, at least 80 per cent. of C.Os are of opinion that the gradings produced by the Boards have little relation to the suitability of an officer for a Regular Commission. This is not only because, in the airy words of the article, "they have had their pet officers turned down." This they wouldn't mind, if they thought the

standard was being kept high. What does irk them is that, while these officers are not accepted, others who are only moderate and some who are downright bad are accepted. This, I repeat, is not my criticism alone; I believe it will be found to be the criticism of almost every serving C.O.

Suppose a number of parents—say about 600—each sent a child to a hospital. Suppose that each of those children, on discharge, appeared to its parents to be far more ill than it was on admission. Would they, knowing that other parent's children had had similar experiences, and a number had died, accept the explanation: "You are not a doctor. You know nothing about it. The child has been scientifically treated. The fact that it came here with a sprained ankle and has been discharged with both legs amputated is immaterial." Of course they wouldn't. They would sue for damages, and they would get them. The hospital would have to adopt other methods or shut down.

Much is made of the fact that senior officers are always biassed. They like a man who says a lot, says nothing; who has a strong personality, or a weak one, according to how much talking they want to do themselves. In fact, it appears that a C.O. judges an officer on almost everything except his work.

Let me say how a Battalion C.O. judges officers for these reports. He has known the officer for, on an average, two years, during which time the Battalion may have been in action or it may not. If it has, he has seen the officer lead men in the field. Operations provide all the test of intelligence that fitting coloured bricks together does—even if it is only in finding a dry place to sleep. Participation—dominance—acceptibility—competence—are none of these things assessable by the manner in which an officer conducts himself in operations?

Suppose the Battalion has not been on operations. The officer has probably often had orders like this: "The 205th Pinkipanis are off to morrow morning. We've got to take over the Fort from them by 14:00 hours to-day. Your Company and two platoons of 'D' will go." The preparations for the move are almost an exact parallel to the Board's test; and they don't just happen for three days. The C.O. has been watching the officer at this kind of thing for two years.

Commanding Officers have seen tests of this nature set to his officers time and again. But the writer of the article quoted above denies that C.Os are competent to assess intelligence and personality. Unless he is unfit for command, he most certainly can assess these qualities. And the reason for his being able to do so brings us to the basic error of the Selection Boards.

These Boards use methods tried in civil life. I have already attempted to show the folly of imagining that anything is necessarily efficient because it is accepted by a businessman. It may be, and often is, quite the reverse; but even if it is not, the last thing we should do in the Army is to select officers as though we were selecting businessmen.

Business houses want men who are good at "selling themselves." In the Army there is nobody we require less than the man who can "sell himself" to his superiors (in this case, the Board). I won't elaborate that—there can be no Army officer of experience who doesn't know what I mean and who can't think of examples. At a Board in the Middle East an I.A.C. Commanding Officer said: "Suppose you get a fellow not much good as an officer, who's clever enough to bluff his way to an 'A' through all this?" and he was told: "In that case he could bluff his way up to the highest ranks and that's all you want." Of course, it's the last thing you want. A man rising on stepping stones of other's dead selves is a very cancer in the body military. If we have too many, that body will succumb.

Every thinking officer who hasn't forgotten what happens in a unit must have observed that very few of his fellows conduct themselves among officers as they do with the men. The first-class leader of troops often sits dumb among his fellows. The man who sparkles and corruscates in the Mess is often useless in getting a job done by the troops. In fact, this is the rule rather than the exception. Yet the Board, while trying to test thoroughly the candidate's powers of working with other officers—his equals—makes no attempt at all to assess his capabilities of supervising and leading subordinates.

To supervise and lead his subordinates is the whole of an officer's job. It is what he is there for. It is necessary to employ a certain proportion of men with military and general education to provide an organisation to maintain and co-ordinate the actions of individual units composed of troops supervised and led by officers. This organisation is called the Staff, and most of its higher branches can best be manned by trained Army Officers. Necessary though the Staff is, however, those who form it have, temporarily, given up the status of an officer, which is that of leader and commander of men. In selecting our officers, we must select those suitable for regimental work.

We can select the Staff Officers from those later. We shall get enough who are suitable. The Board, if it selects anything at all, selects potential Staff Officers and not great captains (or small ones, either). But does it even select good Staff Officers?

The article from which I have quoted says: "The Matrix test is probably the most proven test we have got, results having been assessed on over 2,000,000 British and Indian soldiers." The test has probably been administered to these soldiers and they have been graded, but who proved that the results were correct, and how did they do it? I don't dispute that this is a good test. I merely ask how the fact has been proved. The article does give an explanation of how marks were allotted for the test, but that is all.

The Board is referred to as consisting of highly trained observers. The Psychiatrist and the Pyschologist are highly trained medical men. Their training is indisputable, and as I hate unnecessary grumbling I will only point out that usually in the medical profession the scientific truths of to-day are the fallacies of twenty years hence.

But what about the rest of the Board? Who trained them, and when, and where? I observe that courses (I do not know their syllabus or length) for G.T.Os are to be started at Meerut, but who has done it for the last two and a half years?

I would especially join issue with the author of the article on one matter. He refers to "the President, a Regular officer with thirty or more years' experience of the Army". With effect from 21st March, 1946, an officer was appointed President of one Board. His date of first commission was 27th August, 1931. He was a K.C.I.O. who had been to Sandhurst, and at the time he was commissioned K.C.I.Os got six months' ante-date for the time they lost getting to England after the examination. The officer thus had, at that time, about 14½ years' service. He had also, up to that time, not had the privilege of having himself commanded a Battalion. I quote from the article again: "It is therefore imperative that the President should have great experience, detailed knowledge of young officers....." That is one part of the article which is quite unassailable.

So far, this article has consisted entirely of destructive criticism, for I honestly believe that these Boards to be in a fair way to destroying so much that has been built up in the Indian Army over so many years. A stupid, conscientious officer in an Indian Battalion (or a French, Polish, American, British or Dutch one) is worth every "flash Alf" who ever was pupped. We want some officers with brains, but we want more who'll do what they're...well told under the worst possible conditions, and—of far more importance—will do it from a sense of duty and not with the idea of getting on, or with the idea of satisfying the Board.

Here, to end, are two constructive pieces of criticism. Questionnaires are very popular these days. Let every C.O. be asked. "Do you feel that the actions of these Boards been such as to increase, decrease, or keep level the efficiency of your Battalion in the future?"

Let us choose officers in this manner: every C.O. and Brigadier shall grade them 1, 2, 3 or 4. The candidates shall go, in the same capacity, to another unit, where the C.O. and Brigadier shall grade them again. Then if the new average grading varies from the first by more than one, let the process be repeated in a third unit, and the final grading be on the average of the three. But if they do not so vary—they probably won't—let the final grading be made on the average of the first two.

*As this Journal is published quarterly, we felt it only fair to General Moore to draw his attention to this pargraph. He writes:

"When I wrote the article 'Selection or Personal Prejudice' it was a fact that all Presidents of Selection Boards had over thirty years' service. On my appointment as M.A. to the I.S.F., however, certain temporary appointments had to be made, and I can only conclude that the instance quoted in the paragraph was one of them. It was, however, only an acting appointment.

"Officers will, however, appreciate that the Indian Army is destined to become the national Army of India, commanded by Indians and officered by Indians. It is both logical and desirable that the choice of its officers should fall as quickly as possible (having due regard to efficiency) on Indians, and though in the early days of Selection Boards the Presidents could only be British officers, because they were the only ones with thirty years' service, it has since been deemed advisable that the responsibility of conducting these Boards should fall in greater measure on K.C.I.Os of pre-war experience. Such a responsibility, as that of President of a Selection Board, demands great care and judgment, which I am sure those few officers who have as yet had the privilege of being so appointed will exercise to the best of their skill and ability".

26th Indian Division Reunion Society

Arrangements have been made with the Normandie Hotel, Knightsbridge, London, S.W. 1 for the use of their premises as a 26th Indian Division Reunion centre. An address book will be kept at the Reception Desk.

The Hon. Secretary of the Divisional Reunion Society is Lieut.-Colonel B. E. Greene, M.C., c/o Lloyds Bank, Kingsway, London, W.C. 2, or at 112, Stratford Court, Stratford Road, London, W. 1.

OH! TO BE IN POONA-

By "Mouse."

DURING the big slump in the early thirties I happened to be a member of the Committee of the U.S.I. I was asked by some officers who were about to retire to procure some current information regarding conditions in England, the cost of living, houses, education and such like domestic matters. So I wrote to "Mauser", the author of the invaluable book, "How to live in England on a Pension". "Mauser" sent a charming reply expressing his inability to produce an article owing to his high charges which, he did not think, the U.S.I. could afford, and the matter was dropped. Such inhibitions do not worry me.

The present situation is analogous. There are many officers in India who are about to disappear into a retirement delayed by the war, and many of them are wondering and worrying how they will procure a house, furnish it when procured, and how far their pensions will go in post-war England. Mauser's book, so far as I can remember it without a copy for reference, assumed that the pensioner was A.I. in health, married, with a "ration" of two children of school-going age, in possession of at least £2,000 fluid capital and finally, blessed with a Chartered Accountant's addiction to strong figures.

Assuming these average entanglements Mauser took one by the hand through the labyrinth of selecting, surveying and purchasing a comfortable detached residence (with or without the help of a Building Society); the jungle of pre-war Income Tax; the puddles of local rates and taxes; heating, lighting and watering; cooks, food and bathwater; schools, travelling and dentist's bills; recreation, depreciation, clothing and the daily newspaper. It was a masterly survey of expenditure, both major and incidental, which consumed utterly the pension of £800 of every retired full Colonel at a grim period in English history when Income Tax was, I think, 4/- in the £.

The snag in this analysis, which Mauser proved with engaging skill, was that £800 p.a. was not enough. To possess and maintain such a modest dwelling, such an industrious wife and two such healthy and intelligent children, a teetotal and non-smoking Colonel would require a further £300-400 income. The author then gave practical details of how this figure could be raised by farming, with particular reference to apple-growing. It is an excellent book still procurable in some libraries in India, and well worth studying if only for its nostalgic and tender memories.

Since that terrible slump the only item in a retired officer's budget which has not increased by alarming proportions is his pension. That remains as immovable as some officers in G.H.Q. The greatest bugbear, the most menacing aspect almost, which afflicts the retiring officer is Income Tax. The thought, the appearance of 9/- in the £, shrivels the soul; but, provided one is supporting a wife and a couple of children in respectable poverty, the rate is not quite 9/-. It works out about 5/3. I have had the following figures produced by a financial genius of my acquaintance.

United Kingdom. Income Tax 1946/47. Pension: £750

Allowances ..
$$\begin{cases} & \text{Untaxed } (I/8): & £94 \\ & \text{Personal Allowance}: & £180 \\ & \text{Children } (2) & £100 & \text{Total}: £374. \end{cases}$$
Balance for Taxation: £376
$$\underbrace{ £50 \text{ at } 3/-}_{£326} \underbrace{ £7 -10}_{£326}$$

$$\underbrace{ £75 \text{ at } 6/-}_{£22-10} \underbrace{ £22-10}_{12-19}$$
leaving
$$\underbrace{ £251 \text{ at } 9/-}_{TOTAL TAX} \underbrace{ £142-19-0}_{£142-19-0}$$

The only attractive thing about the above sum is its ease of calculation compared with the Indian mystery, but to you and me it is a lot of money. When you see shabby uneconomic individuals who apparently make or lose that amount of cash at horse or greyhound racing each week without any formalities with an Income Tax officer it withers and blights the delicate buds of socialism which may be growing in your heart.

One's income is now reduced to £600 odd. The next problem is a house, and even Mr. Aneurin Bevan with all the experts, local authorities, builders, plumbers, carpenters and bricks at his disposal offers little comfort. Like many others in India I have thumbed the glossy pages of magazines and periodicals in which the advertisements make a special appeal to house-hunters. To the impoverished officer from the East they offer as much comfort as Mr. Bevan.

One charming little cottage in the New Forest with self-pumped water, outdoor latrines, indoor oak, two bedrooms and an attic, was being thrown away for £3,500. It was too small anyway. Suitable abodes—four bedrooms, a W.C. and electric light—were generally priced at £6,000 and upwards, which of course is rather more than any honest Lieut.-Colonel could accrue conveniently in thirty years.

From these fanciful day-dreams I sought reality. I made inquiries in Norfolk, Durham, Sussex, Liverpool and Belfast. I found that a suburban detached house in its own half acre which cost £1,500 to build before the war was being sold for £5,000 or over. Semi-detached villas worth £800 in 1938 were not available for £2,000.

I went into the country, a move which makes one's children boarders automatically. There the same profiteering prices reign for houses which require some hundreds of pounds for repairs. I toyed with the idea of buying or renting a converted L.C.T., craft which some enterprising officers are rigging up as comfortable houseboats and selling for under £1,000. I could not face the prospect of spending the rest of my life on a mud-flat, no matter how dirt cheap the price, and abandoned the transient brainwave. My family rejected the idea of living in a nice double-decker omnibus when it was discovered that the engine had been rendered unserviceable and the brakes and screen-wipers removed.

Concurrently with these investigations efforts were made to acquire some furniture. Again, one meets Bedlam prices; an ordinary bedstead costs £20. A cheque for £500 might furnish a simple home with the austere necessities of this utility period, but for such a small cheque one would have to sacrifice comfort and personal taste. It was suggested that one should frequent auctions where bargains might be procurable. This fallacy explodes in one's face when one sees

the ring of grim buyers prepared to bid anything. These buyers in expensive limousines penetrate to the most humble auctions where furniture is for sale.

Up to date the result of this recee is to accept the fact that unless one can live with relations one must go into furnished rooms in a cheap locality. The war has been over for only fifteen months and one hopes the present prices are not eternal. For furnished rooms it is not suggested that one should pay less than $2\frac{1}{2}$ guineas a week, which will provide a ghastly existence for father and mother at the cost £273 per annum, leaving eighteen shillings per day for

education, clothes, clubs, cinemas, dentists and growing apples.

A friend of mine has accepted this dire situation, and now lives in a pub tactically situated on a bus-route which conveys his son and daughter to their respective day-schools. He finds this even more than he can afford, and is now searching the local highways and byways for a cottage. There is no point in stressing too much these difficulties and disappointments, especially when one meets on every hand elderly retired people who have existed, toiled, queued and washed up all through the war without any servants or sympathy. I know of one retired General and his wife, both over seventy, who have lived alone since 1940, and there are hundreds more.

The cartoonist Low's Colonel Blimp and Itma's delightful Colonel Chinstrap have now established retired field officers as figures of fun in the public mind. There is, even in the highest and therefore most enlightened circles, a good-natured contempt for these rather ridiculous rentiers from Poona. The Anglo-Indian Colonel has now achieved the position in society wherein even the wit and malice of Thackeray failed to place him. He is, whether he subscribes to the notion or not, a parasite on the public body, a besotted windbag, an Imperialistic mud-head, and possibly on his more violent expressions a danger to social progress. The sooner this type disappears from the close-knit fabric of our new national life the sounder will Professor Laski be able to sleep in his bed.

To have served one's life in India is now almost something beastly. Shakespeare knew the position:

"The painful warrior famoused for fight After a thousand victories, once foiled Is from the books of honour razed quite, And all the rest forgot for which he toiled."

One may be too sensitive of this atmosphere and consequently too hershin one's criticism, but the feeling is abiding although perhaps maudlin.

Nevertheless, the other national poet who sang there would always be an England is right. The present high prices of every common object from 1½d for a four page newspaper (one-fifth devoted to racing news), to an eighthorse power motorized perambulator at £360 (one-fifth devoted to purchase tax), cannot last. The economic experts say these prices cannot last; they are certain to come down or go up. To these experts it appears of small consequence in which direction the inevitable movement will manifest itself. To the bewildered field officer from Poona it is a matter of life or misery.

Another job is the answer, and here again in the overcrowded labour market younger and fitter field officers—without pensions—are two a penny. Recently I met a chauffeur employed, he told me, by a newly demobilised Major. This Major was a gentleman of private means and spent his time racing. He attended all the race meetings in Great Britain in his own car dr ven by my informant. At the beginning of May the Major had cleared £2,000 by intelligent betting; his chauffeur, starting with a capital of £1, was £75 in credit by accepting

his master's advice and not wagering more than ten shillings. I asked how he obtained sufficient petrol to take him from Edinburgh to Hurst Park and back to Chester. "Easy as wink your eye," he said. "That's why the Major keeps me." It strikes me that such a profession is more suitable for bachelors and probably entails an expensive apprenticeship. Although, thanks to my army education, I could drive and maintain a car, I am sure I would lose my way in the black markets and certainly be late for the 2.30.

Farming—pigs, apples, poultry, cattle or vegetables—requires capital and knowledge. A relation (also retired from India) was anxious to buy a field close to his house to extend his small pre-war farm. This field was valued for requisitioning purposes by the local authority for £260 and was bought at the auction

by an elderly disreputable woman for £500, cash.

In a reputable London newspaper the other day an ex-officer (barrister), aged 42, records that an employment agency had offered him the choice of the following jobs: Lorry driver; scavenger; garage hand; plasterer's labourer; general labourer in a gas lamp factory.

These instances show that, whilst there are plenty of jobs available, many officers either through age or temperament might find them uncongenial and often too technical. A Vocational Training School for senior officers is

obviously necessary.

Inexorably and relentlessly one is driven to the sad conclusion that although there will always be an England it will not be the same England envisaged by the romantic home-sick singer in Poona. He might be wise to consider other horizons where existence is less controlled, taxation lighter and amenities less expensive. The Channel Islands, Eire, Tasmania, Kenya, the Dominions all offer a welcome and are worth examination.

I must, however, give a warning. Another friend, retired after many years distinguished service in India, with extra means and a charming house, is so sick of England and its climate that since the end of the war he has been trying to escape. He is not allowed. He informs me that sea passages are so heavily booked by politicians, Ensa clowns and G. I. brides that he might as

well be in a concentration camp.

I have been making tentative explorations into Eire. There is an ugly rush across the Irish Sea and house property in Southern Ireland is being snapped up at high prices. I believe the cost of living there is actually higher than in England, but is compensated by a less severe servant problem and a plenitude of the simple pleasure of life—eggs, butter, bacon, fishing and good manners. My financial genius has worked out the Irish Income Tax, which bears comparison with the U.K. figures given earlier in this article:—

EIRE. INCOME TAX, 1946/47. PENSION: £750

Allowances . . . $\begin{cases} \text{Untaxed (I/5)}: & \text{£150} \\ \text{Pers. Allce}: & \text{£220} \\ \text{Children (2)}: & \text{£120} \\ & & -----\text{£490} \end{cases}$ Balance for taxation: £260

£100 at 3/3: £16-5

£160 at 6/6: £52-0

Total Tax £68-5

By living in Eire one would therefore have an extra £75 per annum to invest insomething solid like he Irish Sweepstakes, which are profitable, legitimate and unmenaced. I shall make a further report.

ARMY/AIR ORGANISATION FOR INDIA'S DEFENCE

By Major-General C.H. Boucher, C.B., C.B.E., D.S.O., I.A.*

"Where there is no vision the people perish".—Proverbs 29,18.

THE tactical doctrine of the war of 1939-45 is well enough known; what we have to do is to be ready for the next war, and it is already apparent that the next war, if there is one, will be nothing like the last. The pigmy Indian Army that is emerging from the giant structure of the army of 1945 is an interim force, organised on last war lines and equipped with available—i.e., last war—weapons. It must be so in order that the immediate needs of India may be met, but already much of the equipment of the last war is obsolete.

Recently, too, in the realm of Science there has occurred one of the greatest advances of the human era. For the first time atomic energy has been harnessed to the purposes of war, and we are not yet able to say how far this discovery will lead us. Certain facts are already emerging, or have emerged, sufficiently clearly to enable some deductions to be made as to our future defence requirements. They are of great significance and of basic importance to our new organisation.

Armour.—In the last war, generally speaking, tanks dominated the battle-field and whoever had the best tank won. Recent developments, however, have ended the dominion of the heavy tank, at any rate for the moment. He who has dominion in the air can concentrate rocket firing fighter aircraft, in whose presence the heavy tank cannot exist. Even if bad weather or darkness prevents aircraft from operating, the recoilless gun and the improved A.Tk.mine have robbed the tank of any superiority it may have enjoyed over the other arms.

We do not yet know what effect atomic energy may have in this matter of the efficacy of armour; it may go either way, but from what we do know it is probable that for the present the heavy tank is obsolete or at least obsolescent. Its uses are limited to these few places on the frontier where they can move, and to similar operations, where the enemy has no aircraft and no modern weapons. The short life of the tracks of a heavy tank is, too, an important factor which limits their mobility.

In India it means that heavy armoured brigades must be located in the vicinity of the place where they will fight, and this involves an accurate forecast of the battle-field and a risk of these expensive units never entering battle. It is the absolute negation of the principles on which the next war is likely to be fought—the principles of concentration and mobility. There is therefore a strong case for the exclusion of heavy armoured formations from the Indian Army of the future, particularly as armour is probably the most expensive of the ingredients of our Armed Forces. Infantry, however, are still assault troops and are still soft-skinned. They still require armour in the assault to subdue the MG.

As, owing to the distance involved, there can be little prospect of heavy enemy tanks ever covering the great mileages necessary to invade India, or to fight on arrival, it seems that the answer to India's armoured problems lies on

^{*}Commander, 2nd Indian Airborne Division.

small, fast, light tanks which do not suffer from track troubles, which retain both strategical and tactical mobility, and are difficult targets for aircraft. The size will be limited by the limits of air transportation, and carriage of light tanks by air is already well within sight.

Supply.—Supply is the basis of war, and must be considered before possibilities of strategy or tactics which are dependent on it. It is the limiting factor to everything, and therefore the effects of the invention of the atomic bomb must be considered first. The results of an atomic bomb on a vital base such as Nagasaki have been seen. No nation will go to war unless they have an adequate supply of such missiles and the most modern means of launching them.

Therefore we must accept the fact that all our present main bases can be blotted out in a night by an aggressor nation—at any rate all well known bases in Northern India such as RAWALPINDI, LAHORE, DELHI, CALCUTTA, KARACHI and QUETTA, which can be easily charted in peace.

Our organisation for the next war, therefore, must be based on numbers of small, dispersed bases in Central and Southern India, supplied and supplying mainly by transport aircraft. If this is admitted, the necessity of secrecy, of an adequate cover plan in peace and of proper deception as to the location of these bases and their communications is of urgent importance.

The big ports of the present day, Bombay, Karachi, Madras and Calcutta, are likely to be eliminated at the outset of war. This must be accepted and our supply lines from overseas organised accordingly. Dispersion will be necessary. Numbers of small ports with poor facilities will have to be used. The rail and road communications to all such ports must be established in peace, and war establishments worked out for organisations like the Bricks of Combined Operations, for off-loading into lighters, and by similar make-shifts.

As transport aircraft will carry an increasingly large share of the supply 'oad it will be necessary to establish a large number of aerodromes for them all over India, so that they can be switched at will to alternative safe areas. We are already comparatively well off in this respect.

The Conditions of the Problem.—The above are the basic facts of modern war on which our future organisation must be based, and towards which our present organisation, doctrine and thought must be directed. The principles to which we must stick are mobility and speed, which involves flexibility and concentration.

In support of these arguments I will quote Marshal of the R.A.F. Lord Tedder, who wrote in the R.U.S.I. Journal of February, 1946: "The first round in modern war takes place in the air—the fight for air superiority; and to be successful one must have reasonable strength in quantity as well as quality, and one's air bases must have security—the security given by dispersal......The lesson is clear. It is no use having a strong army if it cannot be supplied and maintained because we had lost control in the air......I myself believe that the keywords for the future are flexibility and speed...... I think the future lies with David, not Goliath"........

There are certain other conditions or assumptions:—

1. Firstly it must be assumed that India will have no possible intention of indulging in offensive action beyond her frontiers. Her object is simply to repel aggression from across her borders and to maintain order within them.

- 2. As far as can be foreseen at present, any threat must be from the North-east or North-west, and no nation is likely to be in a position to exert a threat of seaborne invasion.
- 3. There are very definite limitations to the money available for defence purposes. To quote Lord Tedder again:— "No peace-loving democracy will tolerate maintaining a Goliath in peacetime."
- 4. First-class natural obstacles exist along the whole of the Northern frontiers, from the Arakan to Gwadar.
- 5. Within these natural frontiers lies a flat country of great distances, with good flying conditions, ideal for the movement of aircraft, but far too vast for the rapid movements of ground forces.

The Threat.—Owing to the natural obstacles of India's northern frontiers, it is safe to assume that the first phase of any invasion of India must be airborne. Such a phase would immediately follow the destruction of all major bases by atomic bombs and would be aimed at consolidating the moral effect of such action, paralysing and replacing the Government of India. Objectives for airborne landings are likely to be areas where the invaders can live on the country and where there are plenty of good airfields or potential airfields and which are not atom-bomb targets. As in all airborne operations, there would be a follow-up force of ground troops, but the greater part of the build-up would have to be by air, owing to the distances and difficulties involved on the ground.

The attack would not be launched until the inevitable Fifth Column had done its work thoroughly, and it would follow a long period of subversive propaganda of the type with which the world has become familiar since Hitler's rise to power. There would therefore be risings within the country in favour of the invaders or liberators. There would also be plenty of warning for those who had "eyes to see and ears to hear".

ORGANISATION FOR DEFENCE.

The principles to be followed and the conditions of the problem have been stated. It remains to offer a solution.

- 1. The 5th Column Threat.—The first threat is the Fifth Column, with its insidious propaganda. The countering of this most dangerous of all attacks is of vital importance, because unless the way has been prepared by the enemy by some such means, no other invasion is likely to follow. It is a responsibility mainly of the civil government, although the Armed Forces are of course vitally interested, and as far as Army/Air organisation is concerned, a considerable Intelligence commitment is involved.
- 2. The Airborne Threat.—Air superiority is the first requirement for an airborne operation, or for that matter, for any major operation. The Air Force therefore will be the predominant arm in the defence of India, and it is sound to argue that the Supreme Commander should be chosen from that Service. His H.Q. must certainly be fully integrated, and the defence plan must be mutually adjusted and combined between all Services from the start.

Our first object in organising for defence must be to win the local air battles. We can only afford a very small air force, and we have no aggressive intentions. We cannot therefore hope to fight beyond the frontiers. All we can hope to do is to hold off any threat until assistance can be sent from overseas. So long as the threat can be confined to airborne invasion this should be within our powers.

The great strength of air power lies in its speed and flexibility. These are the principles which will guide Empire defence and which will bring aid to India, and these are the principles which must guid. India's plan for her own defence; speed and flexibility, so as to concentrate every aircraft and every paratrooper available for use successively at the decisive points.

The decisive points will be those where enemy airborns forces have landed. The role of the Air Force will be to get the Airborne troops to the decisive points. The Army's role will be to stamp out such landings before they can take root. All airborne battle groups within reach will be concentrated in turn on enemy landings, under air cover and in aircraft provided by the Air Force. The locations of these airborne battle groups will be decided by their distance from probable enemy objectives, and can be worked out on a map by compass, according to the endurance of the transport aircraft of the time, at present the Dakota.

Probable atom bomb targets must be given a wide berth. There will be no place in the Army for any combat troops who are not airborne or airtransported. Parachuting will be part of everyone's basic training and any recruits who, for any reason, are unable to jump, will be relegated to ground forces or services. In fact, however, parachuting is already obsolescent, and the airborne assault troops of perhaps only a few years ahead will land from helicopters or from some other airborne vehicle which will enable a whole platoon or more to be put down with all its weapons and equipment. Such a device is already well within sight.

The cumbrous, top-heavy divisions of the last war are dead. These are the limbs of the giant Goliath who has been slain by the Airborne David. Future organisation must be by battle groups, probably about the size of a Para Brigade Group now organised, but in fact limited by the possibilities of air lift and air cover. A complete change in outlook and in doctrine is required in the Army, and here I will quote Lord Tedder again, this time from the May 1946 Journal of the R.U.S.I:—

"Although the Germans had excellent integration between their air and land forces, they thought in terms of land the whole time. They were not prepared to fight an air battle; they were neither equipped nor trained for it"; and again, in the February 1946 Journal:—"Each Service must clear out old shibboleths and outworn traditions, go to the scientists and technicians for all they can possibly give in the way of speed, mobility and economy, develop the whole time with an eye on the other two members of the team in co-operation and not in competition."

The Army is as yet far from being sufficiently air minded. It is still thinking in terms of land and of the last war.

3. The Land-Borne Threat.—Finally, there is the problem of an invasion by land. No major land operation can succeed without air superiority, nor could any land forces of the last war model hope to make much progress against the flexibility and speed of the airborne type of forces envisaged above. We have to ensure, however, that India's frontiers, which are naturally very formidable, are in fact sufficient obstacles to force any aggressor into an airborne invasion, the defeat of which would be within our possibilities, and to prevent his ground or follow-up component from reaching him.

For this purpose we need land forces who can make the greatest possible use of the difficult frontier country along any of the possible lines of invasion.

The tribesmen themselves, who inhabit the frontier regions, are the best possible troops for the job.

On the North there is no threat through the Himalayas. On the N.E. frontier something similar to the Scouts of the N.W. Frontier may exist or could be organised. Irregular frontier corps require the backing of regular troops and these should be for the most part ground troops of the defensive or fortress type, machine gunners, and sappers for laying mines and making demolitions, and mortars for close support. The object is to turn the N.E. and N.W. frontiers into fortress areas which, by reason of their natural difficulties and their warlike inhabitants, can be held economically and securely by second-line fortress troops.

Conclusion.—I have been free with quotations from Lord Tedder. I will finish with one from King David, who also knew how to defeat Goliath:—

1 Samuel 17:—

- 38. "And Saul armed David with his armour and he put an helmet of brass upon his head; also he armed him with a coat of mail.
- 39. "And David said unto Saul, I cannot go with these, for I have not proved them. And David put them off him.
- 40. "And he took his staff in his hand; and his sling was in his hand; and he drew near to the Philistine".

Demobbed Silladars to Keep Their Camels

Ex-silladars of four Indian Camel Transport Companies, R.I.A.S.C., the 41st, 40th, 38th, and 37th, which are to be disbanded, will take their camels with them on return to civil life. They will receive, besides the normal release benefits, three camels fit for at least six months' work or Rs. 450 per camel instead.

Formed out of the old Camel Corps these transport units were organised on the *silladar* system by which all recruits had to supply their own "assami"—a string of three camels—or at least two fit camels and the money for the third. Regular contributions were made to a *chanda* fund which purchased new cames for the *silladars* when their own died and this fund in a company would sometimes amount to about a lakh of rupees.

On mobilisation in 1941, the "chanda" funds were frozen, the Army took over the camels and *silladars* were paid an extra Rs. 10 per month for deterioration in value of their camels. During the war these units carried out station duties in the Punjab and the North-West Frontier Province and took part in columns on the Frontier.

The regimental funds of the four companies, including property and grazing grounds as well as the "chanda" funds, amounting to approximately Rs. 8 lakhs, are to be put into a "Silladar Bene volent Fund" for the education and welfare of ex-silladars and their dependents.

BRITAIN, RUSSIA AND ASIA

BY LIEUT.-COLONEL G. E. WHEELER, C.I.E.

A LTHOUGH Soviet criticism of Britain and indeed of nearly every government in the world is now in full cry, it would probably be optimistic to suggest that it has reached its height. The British have not yet been treated to those extremes of obloquy and abuse which were directed against the Germans; so far as I am aware they have not yet been described as "scabby" (parshivyi). But British policy, the British Press and even British schoolbooks have been described as "filthy" (gryaznyi). Of late the British Press has begun to bite back, though admittedly in rather less proletarian language, and hopes of a mutual understanding and association between the British and Russian peoples, and indeed between Russians and the people of any free country, seem, at any rate for the present, to be slender indeed.

History shows that countries' opinions of each other are largely, if not entirly, conditioned by the extent to which their interests clash. British governments and the British have always been particularly mercurial in their views on Russia. No sooner was the Red Army's resistance to Germany an established fact than a wave of pro-Soviet feeling swept over England. Instead of being a blood-thirsty tyrant, Stalin became a great and wise ruler; from being a cowed and reluctant army of conscripts deprived by purges of all their best officers, the Red Army became an army of heroes, admirably trained, disciplined and led by the finest generals; religion was not really dead in Russia and there was no longer any religious persecution. All these new views were for obvious reasons encouraged by the Soviet Government by such measures as the abolition of the Comintern, the creation of new ecclesiastical bodies and the total exclusion from the Soviet Press and radio of such awkward subjects as India and Palestine.

The pendulum has now swung again: Stalin is now either a complete autocrat after all or he is under the thumb of the *Politburo*; the Red Army would never have stood up to Germany had it not been for the material aid given by Britain and America; the Russian people are slaves once more and the Soviet Government is Antichrist; the O.G.P.U. (abolished in 1935) rules the country with an iron hand.

These changes of heart in Britain are not, of course, universal, but they are widespread and they are largely sincere. In the Soviet Union there have been no such changes on the part of the government, though during the war they certainly allowed the people to modify in varying degrees their hatred of everyone except the Germans; it was quite clear that the valuable bogey of "capitalist designs on the U.S.S.R." must be put away until the real menace of Fascist aggression had been dealt with.

However foolish, hypercritical or regimented these changes may be, the clash of interests which brings them about is real. For Britain its importance lies principally in the East and the purpose of this article is to draw dispassionate attention to certain features of the British and Russian positions in Asia both in the past and in the present, and to suggest the need for a closer and more practical appreciation of the Russian character and the Russian point of view.

CIRCUMSTANCES ALTER CASES

Most British writing on the subject of Anglo-Russian rivalry in Asia takes the form either of indictment or of vindication of the Russian standpoint; the essential difference between the Russian and the British outlooks and the reasons for that difference are less often made subjects of enquiry. I shall presently try to show in what this difference lies, but it will be as well to say at the outset that I am not trying to show which of the systems followed by Russia and Britain in their dealings with Asiatic peoples under their total or partial control is materially the superior. Indeed, I do not think it would be possible to prove which of the policies pursued by the two States towards the peoples of Asia during the past hundred years has been more or less altruistic or which has contributed more or less to their eventual well-being.

The question as to what motives impelled Russia and Britain to establish themselves in Asia is a long and complicated one which it is difficult to answer with precision. The first tide of Russian expansion across the Urals went due east and was the natural consequence of the relinquishment of the Tatar hold on Russian lands. The southward advance to the frontiers of Turkey, Persia and Afghanistan was a later development and was actuated largely by those same considerations of security of which we hear so much today. The earlier expansion was not one of conquest, for the indigenous population of Siberia was extremely small and was quickly outnumbered by the Russian settlers; but the latter soon found themselves menaced and their trading operations disturbed by depredations from the more populous states of Khiva, Bokhara and Kokand which lay to the south. It was this that necessitated the organization of large scale military operations.

The appearance of the British in Asia was not originally the outcome of any imperialist policy, but began as with the Russians in a spirit of merchant adventure. In India, however, military operations began not against the people of India, but against foreign competitors.

The main reason for the difference between the British and Russian cutlooks in Asia is that the problems they have had to face have always been and still are widely different. To acquire her Asiatic Empire, Russia did not have to go overseas at all; her early settlers merely crossed the Urals into country which did not differ geographically from their own. Thus, in spite of the vast eastern and southern spread of Russian expansion, Russian settlers and administrators never felt cut off from their homeland to the same extent as the British did. Secondly, the magnitude of the administrative and ethnographic problems which have confronted the British are out of all proportion to those encountered by the Russians.

Soviet propagandists and their British supporters constantly harp upon the fact of the Soviet Union embracing eighty or more different nationalities. They usually omit to mention that of a population of 182 millions about 140 millions are Slavs speaking approximately the same language and having approximately the same culture, ten millions go to make up the population of the newly re-acquired Baltic States, while only some 30 millions are made up of Asiatic peoples having separate languages and cultures. Of these peoples, moreover, no single one constitutes more than 3% of the population of the whole Union.

In their spread over Asia from the Urals to the Pacific and from the Arctic to the Persian, Afghan and Chinese frontiers, the Russians met little in the way of established culture except in Georgia and Armenia, the Tatar invasions having largely removed whatever had been there before. Great play is nowadays made of the literature, drama and music of the various Asiatic republics and autonomous territories, but it is difficult to find trace of anything which can be compared with the cultural heritage of India, Burma and Ceylon. In the second half of the nineteenth century when Russian expansion reached its limit, Islamic culture in Turkestan was far less advanced than it had been in India under the Moghuls.

As regards religion, Islam was predominant in Central Asia and the Caucasus, Christianity was strongly represented in Georgia and Armenia, while Shamanism and Buddhism were found further to the north and east. But at the coming of the Russians, adherents of the various religions were not found to be intermixed as they have been in India since Moghul times. Finally, in her expansion over Asia, Russia was never opposed by a first-class Power, or even, it may be said, by any military force organised or equipped on modern lines, unless we so regard the army of Fath Ali Shah which in 1826 attempted to regain the former Persian territories in the Caucasus which had been annexed by Russia.

It is perhaps hardly necessary to draw attention to the contrast which the above picture presents to the state of affairs which confronted the British in India. Separated from England by a voyage of three months, the first British arrivals in India found there a population of at least 200 millions, the majority being Hindu with an elaborate culture stretching back thousands of years. Partly superimposed on this ancient fabric was the far more recent but vigorous culture of Islam, which had penetrated a large part of the country, with the result that over huge areas Hindus and Muslims were inextricably intermixed. Finally, the British were for a long period opposed not only militarily and economically by the French and the Portuguese, but by vast Indian armies incomparably more numerous, better equipped and trained than anything encountered by Russia in Central Asia or the Caucasus.

DIFFERENCES OF SYSTEM: THE RUSSIAN WAY

Having drawn attention to the essential difference of the problems confronting Britain and Russia in Asia, we may consider briefly the systems adopted by each Power. The pre-Soviet Russian plan was twofold: completely to remove any military potential which the inhabitants of the Caucasus and Central Asia might possess, and to continue expansion until the frontiers of regularly constituted States were reached. Thus, the determined resistance of Shamil in the Caucasus was relentlessly worn down by the Russians until they could firmly establish themselves on the Turkish and Persian frontiers. Similarly, the Tekke Turkomans were completely and finally crushed in a series of engagements culminating in the battle of Geok Tepe. No serious rising has taken place in what is now the Asiatic part of the Soviet Union since 1882. Once order was restored and the people cowed, the Government of the Tsar applied a policy of Russification.

The Soviet treatment of its Asiatic peoples differs in many essential respects from the Tsarist method, but it is important to realise that it was the earlier system which paved the way for the later one. Soviet politicians found themselves confronted with a huge territory nearly the same size as India, but populated by a congeries of peoples whose total number was little more than half the population of Bengal and not one of which exceeded 6 millions. They

had no military strength and there was little sign of nationalist ambition except perhaps in Georgia. But racially the peoples were fairly compact.

The Tsarist policy of Russification was reversed and indigenous culture was vigorously encouraged. The thinly populated republics were made to and still do rule themselves. Since, however, defence and the broad direction of economic policy remain under Russian control, and since the indigenous rulers belong to the Communist Party, they are not really independent. But in exchange for independence they have security and greatly increased prosperity. There is no reason to suppose that they regard the exchange as an unfair one; nor can they fairly be described (as they often are) as groaning under the Soviet yoke.

THE BRITISH WAY

Even if the British had wished to follow the Russian system in India, it is extremely doubtful whether they could have done so with the resources at their disposal. Completely to emasculate India of her martial elements and thus of her military potential would have been a formidable undertaking. The regularization of India's frontiers and especially that with Afghanistan presents incalculable difficulties. To "anglicize" India when, except in war time, the British population there has never consisted of more than 65,000 constantly changing British troops and a few thousand officials and traders would obviously have been impossible. The political organization of India on a racial instead of on an arbitrarily territorial and politico-religious basis would be many times more difficult than it has proved in Asiatic Russia; but it still may prove to be the ultimate solution.

Whether as a result of moral conviction or force of circumstances, the British in India, so far from breaking down the military potential, reinforced it by every means in their power and with obvious success. They persisted in this policy even though in 1857 it threatened to cut short their hold on the country. They accepted the anomaly of a belt of tribal territory between India and Afghanistan. Finally, they did not seek to change established beliefs and customs except where they interfered with public order. There was no attempt at anglicization, the progress of English as the principal medium of instruction having been largely brought about by the Indians themselves. Probably the only essentially English custom which has become at all widespread is the "teaparty".

ADVANTAGES AND LIMITATIONS OF THE SOVIET SYSTEM

So far as the present and immediate future go there can be little doubt that the Asiatic peoples belonging to the Soviet Union are, from the point of view of health, standard of living, education and prospects, infinitely better off than the peoples of India and most other Asiatic countries. It would be surprising if it were otherwise: from the furthest point in Asiatic Russia, Moscow can be reached in a few days by rail; not only does European Russia adjoin the Asiatic territories, but its European population is more than three times as great as the indigenous population of all the Asiatic territories put together. Apart from this, many millions of Russians have emigrated across the Urals into Asia, three millions having done so between 1926 and 1939 alone.

The extent to which I have insisted on the different circumstances attending Russian and British control in Asia would have been otiose were it not for the fact that the superiority of Soviet achievement in raising the status of Asiatic peoples forms one of the principal themes of Soviet propaganda. This

propaganda constantly implies that if the Soviet system were applied in India, China and elsewhere the lot of the proletariat would immediately improve. To some people this suggests that the Soviet Government is anxious from purely altruistic and humanitarian motives to better the lot of the Asiatic peasant.

There are no doubt many kind-hearted Russian as well as British people who genuinely long to do this, and there is a smaller number who are prepared to subordinate their own interests to those of Asiatic peoples. But that Comrades Stalin and Molotov are kept awake at night by thoughts of the toiling and unenlightened millions of India is as unlikely as that Messrs. Attlee and Bevin are rendered sleepless at the thought of the civic and religious bondage endured by the Oirots or the Jews of Birobidjan. To others the present Soviet mood suggests imperialism, world aggrandizement and war. The truth lies somewhere between these two extremes.

PLUS ÇA CHANGE

To the world at large the Soviet system is either simply wonderful or simply frightful; what most people are inclined to overlook is that it may be simply Russian. A common retort to this suggestion is that Stalin is a Georgian; this can be disposed of by the counter retort that Lord Beaconsfield was a Jew but also one of the most enthusiastic British Imperialists who ever held the office of British Prime Minister. Sixty years later, Hitler's belief that Britain was no longer Britain but merely a tool in the hands of international Jewry led him eventually to disaster and there is a grave danger of us making a similar today with regard to Russia.

The study of Russian history is too seldom undertaken by those who wish to interpret contemporary Soviet policy. Such a study shows unmistakably not only that Russian policy and aims have changed not at all, but that the technique of her rulers displays the same characteristics today as those which at once mystified and exasperated the British Government and public in the last century. Recently we have become aware that Russia has by no means abandoned her traditional aims in the Eastern Mediterranean and the Persian Gulf, that the same security complex as she suffers from today was behind her pan-Slav policy and her advance from Siberia into Central Asia up to the Persian and Afghan frontiers; and that the same suspicion which prevents her from allowing her now largely literate population from mixing with the outside world impelled her to impede the advance of education during the previous regime.

A CLASH OF SYSTEMS

This does not mean that in her dealings with Russia Britain should go back to her attitude of the last century, which was as unrealistic as it could well be. The recent crescendo of Russian criticism is due principally to a subconscious fear on the part of Russia that the present British Government has to some extent taken her measure. The Soviet system in dealing with her own Asiatic peoples and in attracting those adjacent to her territory is one in which the Soviet Government and people sincerely believe, but it is nonetheless one which they intend to use in order to realize their traditional aims referred to above.

Russia boosts her system partly because she believes in it and partly because she hopes it will be useful. I have already referred to one important respect in which the experiment falls short: it has only so far been applied to small Asiatic race elements the largest of which, the Uzbegs, numbers only just over

six millions. Another limitation is that the system with one exception, Outer Mongolia, has not so far been applied to areas which were not part of the former Russian Empire. It remains to be seen how it would work in large populous territories with established cultures and a tradition of intellectual freedom.

Now, an important pre-requisite for the success of the Soviet system in such territories is the persistence of the colonial system against which to set off the benefits of Soviet synthetic independence. What alarms the Soviet Government and lends an added shrillness to its propaganda is the tendency of Britain to substitute for the colonial system genuine national independence to be followed up by a system of freely negotiated treaties. Such a plan might in time develop into something like the American "Good Neighbour" policy obtaining in Latin America, where independence is respected and, indeed, guaranteed, and no stipulation is made as to the form of government provided that the necessary security exists for the conduct of foreign trade.

This would postpone Russia's attainment of her aims, and it is necessary to say that it might also postpone the material advancement of Asiatic peoples, who left to themselves would probably discard democracy altogether and establish varying forms of authoritarian rule. It is significant that after over 100 years of independence, the aggregate illiteracy of the ten republics of Latin America still amounts to over 70%.

THE NEED FOR UNDERSTANDING

That Communism is responsible for the present Russian attitude, that all her aims and aspirations are unreasonable, that she is out for world domination, that she will never consent to co-operate with the western world are misconceptions which if they are allowed to persist will have dangerous consequences. The Russian people are as kindly, peace-loving and intelligent as ourselves. The reason for the traditionally tiresome and intransigent technique of Russian Governments, whether Tsar or Soviet, lies deep in history. It is largely unintelligible to us because the political evolution of Russia has been entirely different from our own and is probably very far from being complete.

But because we genuinely find the Russian attitude obscure and alarming, we should realize that the Russians genuinely find ours equally so. As suggested above, they are particularly apprehensive of our new technique. Britain, they say, achieved all her aspirations in the Middle East and in India. Grown fat, she is now, as it were, getting her weight down, partly perhaps to present less surface to the prods of propaganda, but also perhaps because she is in training for some new act of aggression against the Soviet Union. The fact that French and Italian competition in the Middle East has now dwindled to nothing and that the only other potential rival to Britain is America, whom Russia believes to be in league with Britain, merely adds to Soviet apprehension.

Since free intercourse with the Russian people is nowadays practically impossible, the only guides to their character and attitude are to be found in history and literature. It so happens that these are much more illuminating about Russia than they are about many other countries. It is, for instance, significant that Russia has never in the whole course of her history engaged in war with a first-class Power in pursuance of her territorial aims. Again, the extraordinary sense of mission which is apt to obsess the Russians can be best understood by reading Dostoevski's Diary of a Writer and Turgeniev's On the Eve.

I have tried to show how small Russian experience of Asiatic peoples is compared with our own. This does not mean that the research which they have

conducted in the fields of Asiatic history, ethnography and languages are unworthy of examination. As a matter of fact, this work is of the greatest importance and much of it is unique in scope and treatment. In the same way, although the Soviet system has been applied only to sparsely populated areas, it does not follow that the Soviet theory about the futility of trying to graft western democracy on to countries where the fundamentally different social and religious systems have been deliberately perpetuated, is necessarily a wrong one.

It must be admitted that however great may be British misunderstanding of the Russian character and ignorance of Soviet achievement, Russian misunderstanding and ignorance of Britain is far greater. It is also deliberate. The ordinary Englishman or Indian who seeks to fathom the Soviet point of view can, at any rate, obtain without difficulty the most advanced political literature setting forth in detail the glories of the Soviet system and the iniquities of Western so-called democracy. He can sit in his house and listen with impunity to Moscow Radio doing the same thing on the air. But the ordinary Russian, still less the Oirot or the Jew of Birobidjan, cannot get similar literature setting forth the British point of view, nor may he own a private radio. But this situation must be accepted; it will not change until the Russians reach the next stage of their political evolution.

Anti-Famine Fight: Army's Help Continues

Large numbers of Army vehicles are now assisting the civil authorities in the movement of grain and other foodstuffs to deficit areas.

In June alone, about 450 vehicles of varying capacities were used in the Peshawar, Rawalpindi and Lahore areas. In the Madras area heavy Army transport has been transporting grain. In the U.P., in addition to about 100 heavy vehicles, four motor transport companies (about 600 vehicles) have been transporting foodstuffs.

The Indian States also have had their share of Auny transport. Two complete motor transport companies (about 300 vehicles) have been in commission, moving edibles in Jaipur State. In the mountainous State of Poonch, besides light transport, the sturdy jeep has been used to distribute food to isolated villages in the hill tracts.

Ploughing up another 800 acres of wasteland on the Kabul river at Warsak, near Peshawar, Northern Command have done much to aid the N.W.F.P. Government's anti-famine drive. Troops in this area have now upturned 11,000 acres of virgin soil which are expected to yield several hundred tons of foodgrains.

Southern Command are supplying the Government with 2,000 Army beds, as well as the necessary equipment for medical relief purposes in scarcity areas. The Army has also promised its co-operation in supplementing existing medical and public health arrangements for dealing with epidemics that may arise in the scarcity areas of the province. Ambulance cars, jeeps with trailers, trucks and lorries will be supplied for medical relief work.

The Army is also supplying water piping and pumping sets, prefabricated sheds for storage, and transport for carrying foodstuffs. Meantime, troops all over the country continue to play their own personal part by avoiding waste and devoting even more land, in military areas, to the cultivation of crops.

THE COMMANDERS-IN-CHIEF IN INDIA SINCE 1860

By Brigadier H. Bullock, O.B.E., F.R.Hist.S.

SINCE 1860 the Army in India has had twenty Commanders-in-Chief, of whom six are still living. A full and formal list is given at the end of this article, but their names (in order of succession) and some basic dates may conveniently be given in tabular form:—

Name.	Born.	First Commission.	Became Cin-C.	Died.
	7007	1000	1000	100
Rose	. 1801	1820	1860	1885
Mansfield	1.	1835	1865	1876
Napier		1828	1870	1890
Haines	. 1	1839	1876	1909
Stewart	į.	1840	1881	1900
Roberts	. 1832	1851	1885	1914
White	. 1835	1853	1893	1912
Lockhart	. 1841	1858	1898	1900
Palmer	. 1840	1857	1900	1904
Kitchener	. 1850	1871	1902	1916
Creagh	. 1848	1866	1909	1923
Duff	. 1855	1874	1914	1918
Monro	. 1860	1879	1916	1929
Rawlinson	. 1864	1884	1920	1925
Birdwood	. 1865	1885	1925	1
Chetwode	. 1869	1889	1930	
Cassels	. 1876	1896	1935	
*Auchinleck	. 1884	1903	1941	
†Wavell	. 1883	1901	1941	
†Hartley	1882	1901	1942	

I will not describe their military careers, which are mostly well known or easily ascertained, but will view them as a class. Some details of four of them (Napier, Stewart, Roberts and Birdwood) have been given in my article in which I dealt with the Field-Marshals of the Indian Army.

^{*} First term, 27th January 1941 to 4th July 1941. C.-in-C., Middle East, 5th July 1941 to 15th August 1942. Re-appointed C.-in-C. in India, 20th June 1943.

[†]First term, 11th July 1941 to 16th January 1942. Supreme Commander, S. W. Pacific, 17th January 1942 to 6th March 1942. Re-appointed C.-in-C. in India, 7th March 1942, till 19th June 1943.

[‡]C.-in-C. in India, 17th January 1942 to 6th March 1942. Subsequently the first Deputy C.-in-C. in India.

Of the twenty Chiefs, nine were Indian Army officers (Stewart, Lockhart, Palmer, Creagh, Duff, Birdwood, Cassels, Auchinleck and Hartley); and of the others Napier (formerly Bengal Engineers) and Roberts (formerly Bengal Artillery) were officers of John Company's service who came over to the R.E. and R.A. respectively after the Mutiny, and should therefore fairly be reckoned as Indian Army. Whichever way you count them the share is eleven of one and nine of the other.

The balance between the arms of the service is far from being so even. Of the nine Indian Army men, no less than four (Palmer, Birdwood, Cassels and Hartley) were cavalry officers. But of the British Service only one (Chetwode) was a cavalryman; two (Napier and Kitchener) were sappers; and one (Roberts) a gunner. (Duff was a gunner for some years before he transferred to the Indian Army). All the rest—Rose, Mansfield, Haines, White, Monro, Rawlinson and Wavell—came from the infantry.

The absence of gunners and sappers from the Indian Army representatives is a natural consequence of the I.A. not having had its own artillery and engineer officers during the period from the assumption by the Crown of the Government of India up to the raising of the Royal Indian Engineers and Royal Indian Artillery in recent years. It is clear that the scales were loaded, whether by chance or design, in favour of the Indian cavalry at the expense of the infantry officers of the Indian Army; and this lack of balance has been the more marked in recent times.

Much the youngest Chief was Mansfield (afterwards created Lord Sandhurst) who received the appointment at the age of 46, when he had thirty years' service. Grandson of a distinguished lawyer, he was a greater financier than soldier, and his tenure of the chief command in India is remembered principally for his having court-martialled one of his aides-de-camp, Captain Jervis, in the famous "Pickles" case—a misconceived affair which attracted the widest notice, and did his reputation no good.

The next youngest were Kitchener (aged 52 on appointment) and Roberts (aged 53). Both had already achieved secure fame by high and successful commands in the field, and both were to add greater lustre to their names after vacating office in India. The rest were mostly well above the middle fifties when they were appointed, and three (Napier, Palmer and Creagh) were 60 or 61 years

of age.

The ancestry of many of the Commanders-in-Chief is interesting, and occasionally illustrates the transmission of ability, talent or even genius by heredity. The first on our list, Rose (Lord Strathnairn) is an example of three successive generations in the Dictionary of National Biography—hereinafter referred to as the "D.N.B." His grandfather was an eminent statesman. His father, Sir George Henry Rose, was an able diplomat, which incidentally explains why the future Field-Marshal was born and educated at Berlin. Grandfather George Rose served as a naval officer in youth, and later in a long and varied official life was twice Treasurer of the Navy; and his son was at one time Deputy Paymaster General of the Land Forces. Thus the three generations reveal a talent for tact, administration and leadership, with some reference to naval and military affairs.

Our second name is that of Mansfield, Lord Sandhurst. His father was an English country gentleman, quite undistinguished so far as I am aware, but his grandfather was a prominent lawyer—Solicitor-General in 1780-82, and Chief Justice of the Common Pleas from 1804 to 1814. As the C.-in-C.'s eldest son was Governor of Bombay from 1895 to 1900, some degree of rather diverse talent is apparent through four generations, though dormant in one of them.

Lockhart's father was a Scots clergyman, but his uncle was John Gibson Lockhart, who married the eldest daughter of Sir Walter Scott and wrote the classic life of that author. Both families had many military connections. Sir Walter's profession of lawyer, and his lameness, only permitted him to serve as a yeomanry quartermaster, but his eldest brother died in India as a naval officer, and his eldest son—a lieutenant-colonel of the 15th Hussars—died at the Cape on his way Home from India, to mention only two links with India and the Services.

Monro's family is also noteworthy. It was medical, and highly talented in that direction. The generations ran thus:—

- I. Alexander Monro, the first (1697—1767), celebrated physician (D.N.B.)
- II. Alexander Monro, the second (1733—1817), celebrated anatomist (D.N.B.)
- III. Alexander Monro, the third (1773—1859), another celebrated anatomist (D.N.B.). He had six sons and six daughters, of whom the 3rd and 4th sons were:—
- IV. Sir David Monro (1813—1877), Colonial politician (D.N.B.), and Henry Monro (died 1869) who was father of:—
- V. Sir Charles Carmichael Monro, Commander-in-Chief in India. Though the main strain was for long medical, here again we see the evidence of military tendencies. For Alexander I attended the wounded at the battle of Prestonpans (1745), and his son Donald (D.N.B.) was an eminent army surgeon and published early books on soldiers' health. And, going further back, the father of Alexander I was an army doctor under William of Orange, and his brother was a military officer. And the father of these last two was a knight who fought at Worcester for the second King Charles.

Such abilities as Kitchener had in his blood seem to have come not by the male line, which contained no persons of distinction for some generations back, but through his mother, who was one of the Chevalliers, a distinguished mathematical family. Her father, a clergyman, was also a doctor of medicine, but figures in the D.N.B. as a famous agriculturist, who improved the breed of wheat. This ancestry, coupled with the profession of Earl Kitchener's father (a lieutenant-colonel), seems to account for his success as an officer of engineers, who first came to notice for sound survey work in Palestine and Cyprus.

In this connection, Lord Roberts presents a problem. His family was certainly talented—but as artists and architects. His grandfather, John Roberts of Waterford, was an architect of distinction who rebuilt that city in 1774: two of his 24 children are in the D. N. B. But John Roberts' eldest son was a country parson, whose son, General Sir Abraham Roberts of the Bengal Army was father of "Bobs". Two of Sir Abraham's brothers became captains in the Royal Navy. It would seem that military ability, if inherent in this family, must have come in by marriage.

It is worthy of remark that although about half of the twenty Chiefs were created peers, and several were likewise created baronets, in recognition of their achievements, yet only one had an old hereditary title—Sir Philip Chetwode, who succeeded as seventh baronet. (Rawlinson was a second baronet, but the creation was as recent as 1891). The fathers of the other eighteen were mostly minor country gentry, members of the professional classes, and officers of the army or navy. (The fathers of Roberts, Palmer, Rawlinson and Birdwood were in the Indian services). Two Cs.-in C were sixth sons—Creagh, of an Irish

captain in the Navy, and Monro, of a Scot who sought his fortunes overseas. Such can hardly have been endowed with a silver spoon: compare also the case of Palmer, left an orphan at the age of two when his father, a captain in the Bengal infantry, was killed in the diastrous retreat from Kabul.

The most intellectual father of a Commander-in-Chief was undoubtedly Sir Henry Creswicke Rawlinson, the eminent Assyriologist, who began life as a subaltern in the 1st Bombay Grenadiers. But "Rawly's" grandfather is known to fame only through having bred and owned "Coronation", the Derby winner of 1841; and the military talent here seems to have been made, not born.

It is difficult, and perhaps rash, to say which of the Commanders-in-Chief should be described as English, which Scottish, and which Irish. Rose and Kitchener are often referred to as Scots and Irish respectively, but in the male line they seem really to have been more English than anything. Napier and Stewart were of Scottish descent, and Monro was half Irish and half Scots. The fathers of White and Creagh were Irishmen. The Roberts family came from Ireland but the field-marshal's grandmother was a Huguenot, and I think that Kitchener's mother was also of French descent. Mansfield, Birdwood and Chetwode are English. The Welsh seem to be entirely unrepresented. The matter could not be taken much further without essaying the vast and perhaps impossible task of tracing the sixteen great-grandparents of each of the twenty persons concerned.

The peers are Rose (Baron Strathnairn), Mansfield (Baron Sandhurst), Napier (Baron, of Magdala), Roberts (Baron, Viscount St. Pierre, and Earl), Kitchener (Baron Denton, Viscount Kitchener and Viscount Broome, and Earl), Rawlinson (Baron), Birdwood (Baron), Chetwode (Baron), and Wavell (Viscount). The only ones to be elevated to the peerage before they became C.-in-C. in India were Napier and Kitchener. Others, such as Birdwood and Chetwode, were created peers some considerable time after they left India.

The baronets were Chetwode and Rawlinson (both inherited), Stewart and Roberts (created, both for services in the Second Afghan War), Birdwood (created, for services in the 1914-18 War), and Monro (created, for services as C.-in-C. in India). Haines refused a baronetcy. It is curious that Monro, the only Chief who was rewarded with a baronetcy for his services as such, would in the ordinary run of things have received a peerage and a monetary grant as one of the Army Commanders in the B.E.F., had he not been removed to India in 1916 much against his wishes.

Three won the Victoria Cross—Roberts, White and Creagh—and four the modern but very high distinction of the Order of Merit—Roberts, White, Kitchener and Chetwode. Kitchener was the first recipient of the O.M.—he was invested with it by the new King Edward VII on his return from victory in South Africa. The King was in bed recovering from the operation which had delayed his coronation; had the first O.M. under his pillow; and gave it to the surprised Kitchener. Roberts' son won a posthumous V. C. Roberts and Kitchener were both Knights of the Garter and of St. Patrick. Roberts was a Privy Councillor, and Mansfield an Irish Privy Councillor. Other Orders are shown in the list at the end of this article.

The majority of the Cs.-in-C., of course, held other high commands in peace and war. But Duff never commanded anything else. Though appointed to the command of a unit and later of a brigade, he never actually took over either, but remained on the staff. (In this he resembled three modern field-marshals of the British Service. Sir William Robertson is said never to have commanded

anything larger than a corporal's guard. Lord Nicholson never commanded a unit or formation in peace or war. Sir Henry Wilson had a provisional battalion, for a year, and a division for a few months. Yet all three became Chief of the Imperial General Staff). Duff 's tenure as C.-in-C. was very short. He took over on 1st March 1914. On 1st August 1916 Sir Charles Monro was summoned to G.H.Q. in France and told by Haig that the Cabinet had decided to send him to India; and on 1st October following Duff vacated office, and went to England to give evidence before the Royal Commission on the Mesopotamian Campaign. The Commission held him third amongst those most blameworthy for its failures. He did not live to draw up his defence but, his health gradually declining, died in January 1918.

All the other Chiefs had held commands, in no case less than a division; but Mansfield never commanded any formation in war. He fought in the First Sikh War, and commanded a battalion in the Second, while in the Mutiny campaign he was Colin Campbell's Chief of Staff. But he refused the command in China in 1860, and his subsequent posts were all "peace-time"—Bombay (1860-65), India (1865-70), and Ireland (1870-75).

White had to wait 26 years after his first commission for a chance of seeing active service. He then promptly won a V.C. as well as a C.B. and a brevet lieutenant-colonelcy—all in his first campaign! This was the Second Afghan War, in which Creagh (our only Bombay Army officer, by the way) also received the Victoria Cross. Rose, too, had to wait a long time for a chance of earning distinction in the field. Commissioned in 1820, and a major within seven years of that date, it was twenty years before he saw some rather nebulous active service (as a staff officer in the Turkish army, fighting the Egyptians in Syria!); and it was not till the Crimea, when he had already to his credit a length of service greater than most officers ever attain, that he made good. As chief liaison officer with the French, or as they called it then "Queen's Commissioner at Headquarters of the French Commander-in-Chief", he served at the Alma and Inkerman, was recommended for the V.C., and got a C.B. and promotion to major-general.

Two Cs.-in-C. died during their tenure—Lockhart at Calcutta on 18th March 1900, and Rawlinson at Delhi on 28th March 1925. Others were notable for their longevity—Haines (born 10th August 1819, died 11th June 1909, aged 89\frac{3}{4}), Rose (born 6th April 1801, died 16th October 1885, aged 84\frac{1}{2}), and Napier (born 6th December 1810, died 14th January 1890, aged 79).

Napier and Roberts are buried in St. Paul's; Monro in Brompton cemetery; Rawlinson at Trent in Dorset; and Rose at Christchurch in Hampshire (I believe that Stewart is also buried in the same ground beside the Abbey). Kitchener as is well known went down with H.M.S. *Hampshire*, but is specially commemorated by the Kitchener Memorial Chapel at St. Paul's, beneath the Bell Tower, which contains a fine recumbent effigy and other sculptures by W. Reid Dick.

Amongst the London statues are those of White (equestrian, in Portland Place, just by No. 47, where Roberts lived for some years); Rose (at Knightsbridge, a fine equestrian figure by Onslow Ford, cast from guns taken in the Mutiny); Kitchener (on the Horse Guards Parade, by John Tweed); and Roberts (in the same place—a copy of the statue by Harry Bates at Calcutta, of which there is another replica at Glasgow). Other memorials are to be found in many parts of the world: mention may be made of the Lockhart Memorial Column at Rawalpindi, a landmark on the Grand Trunk Road.

Some personal details may be given. One of Napier's sons married one of White's daughters. Lady Chetwode is wife of one Field-Marshal, niece of another (the 3rd Lord Methuen), and great-grand-daughter of a third (Lord Combermere of Bhurtpore). Kitchener was I think the only bachelor: Napier had fifteen children.

I have dealt only with permanent Commanders-in-Chief. During the period under review there were four officiating, acting or temporary incumbents:—

Nairne (20th March 1898 to 3rd November 1898, on White's departure to take over as Q.M.G. at the War Office).

Birdwood (3rd August 1924 to 20th November 1924, while Rawlinson was on leave in England).

Jacob (3rd April 1925 to 5th August 1925, on Rawlinson's death).

Cassels (21st May 1933 to 18th October 1933, while Chetwode was on leave in England).

Birdwood and Cassels subsequently became Cs.-in-C. in their own right. Sir Claud Jacob has been dealt with amongst the Indian Army Field-Marshals. Lieut.-General Sir Charles Edward Nairne, K.C.B., was a distinguished officer, formerly of the Bengal Artillery, who saw much active service, greatly improved the shooting of the gunners in India during his time as Inspector-General of Ordnance (1887-92), was C.-in-C. of the Bombay Army, and died in February, 1899, aged 66.

A formal list follows:-

4th June 1860.—Lieut.-General Sir Hugh Henry Rose, G.C.B. (afterwards first Baron Strathnairn, of Strathnairn and Jhansi; Field-Marshal; G.C.S.I.).

23rd March 1865.—Lieut.-General Sir William Rose Mansfield, K.C.B. (afterwards first Baron Sandhurst; general; G.C.B., G.C.S.I.).

9th April 1870.—Lieut.-General Robert Cornelis Napier, Baron Napier of Magdala, G.C.B., G.C.S.I. (afterwards Field-Marshal).

10th April 1876.—Lieut.-General Sir Frederick Paul Haines, K.C.B. (afterwards Field-Marshal, G.C.B., G.C.S.I., C.I.E.).

7th April 1881.—General Sir Donald Martin Stewart, Bart., G.C.B., C.I.E. (afterwards Field-Marshal, G.C.S.I.).

28th November 1885.—General Sir Frederick Sleigh ROBERTS, V.C., G.C.B., C.I.E. (afterwards Earl, Field-Marshal, K.G., K.P., O.M., P.C., G.C.S.I., G.C.I.E.).

9th April 1893.—General Sir George Stuart White, V.C., G.C.I.E., K.C.B. (afterwards Field-Marshal, O.M., G.C.B., G.C.S.I., G.C.V.O.).

4th November 1898.—General Sir William Stephen Alexander Lockhart, G.C.B., K.C.S.I.

19th March 1900.—General Sir Arthur Power Palmer, K.C.B. (afterwards G.C.B., G.C.I.E.).

28th November 1902.—General Viscount KITCHENER of Khartoum, G.C.B., O.M., G.C.M.G. (afterwards Earl, Field-Marshal, K.G., K.P., G.C.S.I., G.C.I.E.).

10th September 1909.—General Sir Garrett O'Moore Creagh, V.C., G.C.B. (afterwards G.C.S.I.).

8th March 1914.—General Sir Beauchamp Duff, G.C.B., K.C.S.I., K.C.V.O., C.I.E. (afterwards G.C.S.I.).

1st October 1916.—General Sir Charles Carmichael Monro, G.C.M.G., K.C.B. (afterwards Baronet, G.C.B., G.C.S.I.).

21st November 1920.—General Baron RAWLINSON of Trent, G.C.B., G.C.V.O., K.C.M.G. (afterwards G.C.S.I.).

6th August 1925.—Field-Marshal Sir William Riddell Birdwood, Bart., G.C.B., G.C.S.I., G.C.V.O., K.C.M.G., C.I.E., D.S.O. (afterwards Baron, G.C.M.G.)

30th November 1930.—Field-Marshal Sir Philip Walhouse Chetwode, Bart., G.C.B., G.C.S.I., K.C.M.G., D.S.O. (afterwards Baron, O.M.).

29th November 1935.—General Sir Robert Archibald Cassels, G.C.B., C.S.I., D.S.O. (afterwards G.C.S.I.).

27th January 1941.—General Sir Claude John Eyre Auchinleck, G.C.I.E., C.B., C.S.I., D.S.O., O.B.E. (afterwards Field-Marshal, G.C.B.)

11th July 1941.—General Sir Archibald Percival Wavell, G.C.B., C.M.G., M.C. (afterwards Viscount, Field-Marshal, G.M.S.I., G.M.I.E., P.C.).

17th January 1942.—General Sir Alan Fleming Hartley, K.C.I.E., C.B., D.S.O. (afterwards G.C.B., G.C.I.E.).

7th March 1942.—General Sir Archibald Percival Wavell, G.C.B., C.M.G., M.C. (second term).

20th June 1943.—General Sir Claude John Eyre Auchinleck, G.C.I.E., C.B., C.S.I., D.S.O., O.B.E. (second term).

Field-Marshal Lord Wavell President of Kipling Society

Lord Wavell has become President of the Kipling Society. No more appropriate successor to the late Major-General Dunsterville, who was the original of Stalky, could be named. For not only is Lord Wavell now Viceroy of the land of Kipling's birth, but he combines Stalky's gift for soldiering with Beetle's love of letters.

Lord Wavell is, moreover, an ardent admirer of Kipling's works and one of the founder members of the Kipling Society. After his triumph at Sidi Barrani the Society sent him a telegram of congratulation "on Tabaqui's discomfiture". Lord Wavell showed both his knowledge of Kipling and his appreciation of the allusion by his reply: "Hope Shere Khan's skin will soon be on the council rock".

For the benefit of those who are not as familiar as Lord Wavell with the "Jungle Books", Tabaqui is a jackal who toadies to Shere Khan, a tiger, until Mowgli kills Shere Khan and hangs his skin on the council rock of the wolf pack.

The allusions to Mussolini and Hitler are obvious,—" Yorkshire Post,"

A P.O.W. IN JAPAN

BY COLONEL W. A. TROTT, M.C.

SO MUCH has been heard of the unrelieved gloom which beset our prisoners of war in Japanese hands that I should like to show something of the lighter side which occasionally illuminated this unhappy period in our lives.

At the beginning we were camped at a place called Shiri Kawa, at the southern end of the island of Formosa. The camp, an officer camp, was a particularly insalubrious one, being located in the midst of malarious paddy fields. To add to our discomforts, we were being subjected to all the pinpricks that the Japanese knew so well how to administer. Ostensibly we were being punished because we had refused any longer to go out and labour in the fields. Starved and beaten and harried, there seemed no reason to suppose that our treatment would not so continue until the Allies retook the Island, or until we were carried off one by one to the local cemetery.

It was about 1 p.m. on a Saturday in mid-September, 1944. The bridge fiends were assembling for their week-end orgy of bridge. (We were not allowed to play games of any sort except on Saturday afternoons and Sundays.) The first glorious hand had been dealt when along the corridors came a shout that all senior officers would leave the camp at daylight next morning, with a minimum of kit.

Speculation was rife. Rumour had a free vein—and believe me, rumour in a prisoner of war camp could reach fantastic proportions. The gloomy ones predicted that the Nips had decided, rightly we had to admit, that the senior officers were a thoroughly bad influence in the camp, and they were going to remove them to a real punishment camp. The optimists opined that our merits had at last been recognised, and we were to be removed to a sumptuous hill station in the interior. As the sequel will show, our fears and our hopes each in turn gained the ascendancy as the journey proceeded.

There is little to be gained by trying to paint the discomforts of travel under the Japanese Travel Agency. They excelled themselves on these occasions. We never ceased to marvel at the number of prisoners of war they managed to pack into a given space, be it a ship or train. We were removed from the camp in lorries to the railway station. The train steamed south. That could be interpreted according to individual fancy, but when we detrained in the evening there was something familiar about the landscape, and doubts hardened into certainty as we boarded a sugar mill light railway.

We were destined for Heito. We had been there before. Of all our camps it was the gloomiest, most depressing. The "Punishment Camp School" were almost happy, Heaven help them, in their "I-told-you-so" attitude. Heito it was. The fat, greasy Commandant was there to greet us, all smiles and sucking of teeth, with an evil intent in his heart he could not conceal. Here we were thrust into thatched huts, with mud floor. We were not allowed to talk to the prisoners who were already in the camp, and to ensure there was no fraternisation they even forbade us the use of the wash places and the latrines. Our sanitary arrangements consisted of one kerosene tin at the end of the hut for 65 of us.

A gloomy night. But at dawn the Camp Commandant suggested perhaps we would like a walk in the country, just for exercise. We were not deceived by this apparently innocent suggestion. However, we had no choice, and after walking about a mile along a stony river bottom, a halt was called. Here an adjournment was made en masse to an adjacent sugarcane path. When we were again fallen in, the Commandant suggested "Callisthenics", and we "knees bended" by number for about half an hour, when we turned back towards camp. Before we reached the camp a halt was called, and we were addressed by the Commandant.

He thought a little field exercise would be good for us. Under the bank on which we were standing, he explained, was an assortment of mattocks, picks, etc., and we were to set to work to clear the field in front of us of the sugarcane roots from the last crop. I have never seen such a look of consternation pass over a crowd before. We were caught, and here, indeed, was the thin end of the wedge, which was being used to lever us back to coolie work, which we had fought so hard to get rid of. The only joy I got out of the incident was the knowledge that one or two of our confirmed and congenitally lazy ones had been out-manoeuvred, and the sight of them tugging at sugarcane roots under a tropical sun did a lot to compensate for my own bitter distaste for the work.

One other compensation there was. About two fields away a B.O.R. prisoner of war was in charge of a pair of water buffaloes, harnessed to a plough, and they were ostensibly ploughing. Years must have been spent by this man training his unwieldy team, for the pace at which they moved could not have been registered by the slowest motion camera. Ten could have been counted quite slowly between the movement of each leg in turn. We human animals thought we had achieved the ultimate in slow motion when working for the Japs, but those water buffaloes had forgotten more than we ever knew on the subject.

About two days after this we were ordered to be ready to move at daylight the next morning, with only so much kit as we could carry on our knees.
Rumour this time pronounced a trip by air, and the rumour-mongers were right.
Next morning, with no regrets (for we felt nothing could be worse than Heito
CAMP), we were taken off to the aerodrome, and flown in transport planes to an
aerodrome at the southern end of the island of Kyushu, southernmost island of
Japan. En route we passed over Okinawa, shortly to become the scene of desperate fighting; but that development was hidden from us.

On our arrival in Japan the atmosphere changed dramatically. We were treated almost as if we were human beings. We had a residue of our Formosa guards still with us, notably Chicago Bob, a particularly nasty interpreter, who continued to exercise Formosan methods until his activities were checked by a Japanese officer at our next halting place. It was a great relief to lose his "Youse Guys" as a preliminary to every order.

We were met by buses at the airport, and taken off to a Japanese airport hotel. Here we were given a good meal, well-served, Japanese fashion, of course, on low tables, we being seated on the floor. It was the first decent meal we had in captivity, and it left a correspondingly deep mark on our memories. To me, personally, it remains one of my most poignant memories, for I arrived with a really foul headache, and could not eat the meal—a loss I continued to brood over for the remainder of my time as a prisoner of war.

That evening we were bundled into lorries again and taken to the railway station. Before leaving, an agitated hotel manager rushed out and overwhelmed

the Jap officer-in-charge of us with a deluge of, to us, incomprehensible Japanese. It proved to be that he was missing Hotel spoons and forks. We were asked to disgorge, and from the pockets of erstwhile respectable senior officers the missing cutlery was produced. Moral: when entertaining exprisoners of war count the spoons.

We entrained, and steamed north through the most lovely scenery. A succession of landlocked bays bordered by pinewoods, and backed by high ground, made a lovely memory of the few hours before darkness set in. It is worth remarking here that we were allowed to enjoy the scenery, an hitherto unheard of luxury. Always in Formosa we had travelled with blinds closely drawn, thus ensuring the maximum_of discomfort in the fantastically overcrowded carriages.

Late that night we arrived in Beppu, on the north-east coast of Kyushu. This place had been a famous hot spring resort, and boasted numerous tourist hotels. To one of them we were taken. It catered for a Japanese clientele, some of whom were still in residence. It was delightfully clean. Here I might digress to pay tribute to the general absence of small insect irritants throughout our incarceration. In Mukden later we were to suffer a plague of sand fleas; but of that more later.

Our rooms were deeply covered with soft mats, and for bedding we were given an eider down or Indian rezai, which proved to be needed, as the nights were growing cold. The food was good and well served; but woefully short. Doctors could point to the advantage of getting up hungry from meals; frankly, we disagreed. We stayed in Beppu about ten days, and were left very much to our own devices, except that we got no exercise, not being allowed to move outside the hotel.

The hotel overlooked a tidal estuary, and here we had evidence of the Japanese facility of making do with primitive resources. Each morning squads of women A.R.P. workers paraded, buckets in hand, and proceeded to put in half an hour's strenuous exercise hurling buckets of water at a figure of Roosevelt perched on top of a 20-feet high moveable pedestal. When they got a hit there were congratulations from the dour male instructor; but very little evidence of levity amongst the little ladies, who would have preferred to have seen a fire engine doing the job. It was a very serious and business-like performance.

During our stay here four Jap aircraft carriers anchored in the bay. We hoped that the last of this type of craft had been sunk. There must have been adequate submarine protection across the bay somewhere, for there was no evidence of anti-submarine precautions on the carriers themselves. They lay very peacefully at anchor, and proceeded to give their crews shore leave.

We left Berpu by train in the early morning, and arrived at Moji that afternoon. You can imagine how the rumour-mongers revelled in the situation. It was known on the best authority that we were going to a pre-war hill resort near Kyoto on the main island of Honshu. Alternatively we were going up the west coast of Honshu. We waited at Moji for the electric engine to be attached, which would run us through the newly opened Moji-Shimonoseki tunnel. Gloom descended on us when an ordinary steam engine fastened itself on to the rear of our train, and we steamed off south-west along the north-west coast of Kyushu, through miles of blast furnaces.

Late on a pitch black night we detrained. No one had the faintest idea where we were. Speculation was rife. Eventually we were packed into buses, and felt our way to what looked very like a wharf. As our eyes accustomed

themselves to the gloom, we could just discern a steamer lying alongside in complete darkness. On to this we were packed, and believe me, whenever the Japanese naval authorities had the handling of us, packed was the right word. Before I leave the wharf, however, I must mention overhearing the local bus conductress helping her driver turn his bus. "Back-back," "Stop", "Awri" were the words she used—evidence of how much the Japs have borrowed in dealing with modern means of transportation.

After a most uncomfortable night we sailed at daylight for an "unknown destination". As, however, our destinations were always unknown this did not particularly worry us, and in fact the mystery did help us while away the time in speculations. We were escorted across the sea of Japan by two small escort vessels, our escort exploding two floating mines en route. About 5 p.m. that evening we arrived at the very modern port of Fusan, at the southern tip of Korea.

Here a surprise awaited us. On disembarkation we were taken to a European-style hotel, where we were met by the Manager and his staff, and were given a three-course European meal, followed by coffee. The meal was well-cooked, and was served by very presentable little Japanese waitresses. Whoopee! Our optimists were full of "I-told-you-so's". Of course, we were being handed over to the Russians for internment under some scheme which they knew must exist, and visions of our living at Vladivostok, surrounded by bags of Home mail, and tons of Red Cross parcels, could hardly be resisted by even the most hardened pessimist.

However, after dinner we were crowded together in a set of dirty rooms, devoid of any sanitary devices, to spend the night. Long before daylight we were taken off to the hotel for a good breakfast of fried fish, and then were entrained on the South Manchurian Railway. Crowded as usual, we were in for a three days journey. The highlights of the journey were that we were allowed to look out at the scenery; we were allowed to stretch our legs at the long halts; and we were given, at intervals, very well baked rolls of bread—the first bread we had tasted for two and a half years.

The Korean scenery was very fine. We passed through Keijo (Seoul), the capital, at night. It seemed a very modern station. Incidentally, the South Manchurian Railway was a show piece. Rolling stock and permanent way seemed to be very well kept. We crossed the Yalu river at dawn—it was a wide estuary where the railway crossed. To those of us who were students of military history, the journey from now on was full of interest.

Mukden was reached in the evening—a very sprawling, industrialised city. The next day about midday we reached our destination—a place called Shengshi-Tun, about 150 miles north-west of Mukden. A miserable looking place set in the middle of a seemingly illimitable plain. It was piercingly cold. We had met our first hard frost in Northern Korea, and now we began to realise what a Manchurian winter was to be like. The date was the 15th of October, 1944, and we were to be frozen in from then on until the middle of the following April.

There was usual delay of hours before we were put into our barracks. The cold proved too much for some of our emaciated fellow-prisoners, and stretchers had to be requisitioned to carry them off to the camp hospital. The barrack proved to be a well-built Russian two-storeyed barrack, fitted with double windows and outer doors. There were an adequate number of Russian-type

stoves (known as Patrikas). The only question was: Should we get the coal to keep them going? And this was to be my headache as Liaison Officer between the prisoners of war and the Japs for the next six months.

Another episode had ended, and with it the exalted dreams of our optimists evaporated, or perhaps it would be better to say, "frozen into immobility". Here we were, and here we stayed for seven long winter months. Nevertheless, on balance we had gained a lot. Our treatment here was better than we had experienced heretofore, and above all the move had shaken off the deadly lethargy of the malarious camp in Formosa, gave us fresh subjects for talk, and fresh bases on which to build our dreams of early freedom.

I have always wondered what actually happened to prisoners of war when peace was declared. How did they learn about it? And from whom? And what were their reactions? Little did I think that I should ever have first-hand knowledge of the experience before I finished my service.

It was now August, 1945, and we were inside the walls of a Japanese prison in Mukden. The weather was hot, and we were suffering from dysentery. Amongst our minor worries was a plague of sand fleas. We had little or no inkling as to how near the end was. We did know the Russians had declared war; but their forces were moving very slowly south across the Amur river, and there had been no sign whatever of their aircraft overhead. We ourselves were standing by to be moved at short notice to an unknown destination; and there were many amongst us who felt that the next journey might well be the one from which there is no return.

On the morning of August 16 the camp turned out to watch two very large aircraft in the distance. Whilst we watched a cloud of parachutes broke. There was the usual discussion, but the majority opinion was that it was the Japs perfecting their anti-parachute landing defences. Nevertheless, an air of suppressed excitement pervaded the camp all day, and that evening it was rumoured that some American soldiers had been seen being put into the Japs' guard room. The rumour could not be pinned to anyone who had actually seen the Americans, and in any case they might well be some American airmen prisoners of war, whom we knew to be locked up in a nearby camp.

That evening the usual rollcall parade took place. The Jap officer, as poker-faced as ever, barked his orders, and gruffly acknowledge the salute. I took the opportunity of calling his attention to the total inadequacy of the light in the room, a deficiency to which I had called his attention before on numberless occasions, always to be met by an assurance that something would be done. But nothing ever was done. On this occasion the usual assurance was given; but this time a Jap orderly arrived with a new bulb immediately after parade, and when I recovered from my astonishment I remarked to the section: "Peace must have been declared". I was right.

Next morning, August 17, the senior officers of each nationality were sent for by the Japanese Camp Commandant, who frigidly informed them that an armistice had been signed, and produced from an adjoining room an American Lieutenant-Colonel and half a dozen American enlisted men, who had arrived the day before from Kunming in Super-Fortresses to act as liaison with the American forces in China.

They had brought a wireless set with them with a range just sufficient to reach the outside world. Their arrival had been unannounced to the local Jap Commander, who knew, or who professed to know, nothing of the armistice. Their reception was hostile, and their lives were in grave danger for the first few hours. However, the local Jap Commander got orders from his superiors that in fact an armistice, or in reality unconditional surrender, had taken place, and they were saved.

The arrival of one officer and six men in the middle of Manchuria did not materially alter the balance of power, and the status quo ante was continued. The Japs still continued to run the camp, carry out routine roll calls, etc., and their demeanour did not change by one iota. Unarmed as we were, and completely in the dark as to the sympathies of the local population, we acquiesced in this anomalous situation until the evening of August 20.

That evening a Russian armoured column, preceded by flights of Russian fighters, entered Mukden, and the Russian commander, with a lovely secretary as interpreter, lost no time in visiting our camp and announcing in a fiery speech: "You are free". The Russian then proceeded to fall in the Jap guards, disarm them, hand over the arms to us, and then with a bow to our senior American General, he said: "The prisoners are now yours". About a month later, when we vacated the camp, the Japs were handed back to a very disappointed Russian General, who had hoped, I feel sure, that we would have liquidated that liability.

All that night the prisoners sat round in groups and talked and talked and talked. There was no immediate evidence of jubilation. We were stunned. It would take time for us to realise that we were no longer under the domination of a sadistic, evil-minded enemy. As that realisation slowly came to us, the feeling was one of relaxation and a great tiredness. For years we had been living on our nerves. Never by night nor by day could we relax. At every corner a Jap sentry might be met with whose actions one could never predict. Even at night we were liable to close inspection by officers and sentries, and to be turned out on a roll call parade, sometimes as often as three times during a night. It took time to realise we were free from all this.

Meantime, we had to go on living on the same filthy camp. Of course, we carried out our own camp administration. Soon a few of the most senior, and of our most debilitated comrades, were flown away to Kunming. But the majority of us had to stick it out until September 10, when we were entrained for DAIREN. There we were received on board an American Hospital ship, and we could at last feel that we were free men once more.

I would be ungenerous to a degree if I failed to pay a tribute to all that our American Allies did during those last weeks in Mukden to alleviate our most pressing needs. Ample and luxurious food supplies were flown in from far-away Kunming and dropped by parachute. In the same way ample medical supplies, and supplies of clothing, were dropped. Aesthetically (if that is the right word), we were catered for by the provision of gramophones and loud speakers at every corner of the camp, giving us "hot" rhythm most of the twenty-four hours, and by the provision of a cinema, which reintroduced us to the "lovelies" of the Western world—whose new hair styles we hated. The process of rehabilitation had begun.

That, then, for those of you who are interested, is what it feels like to come back from death to life,

FOUR MONTHS WATCHING ARNHEM

BY CAPTAIN S. P. MORSE.

EAST of Nijmegen the Rhine divides, and flows from then on in two great streams to the sea. On the south bank of the Southern arm—the Wal—stands Nijmegen. On the north bank of the Northern—the—Lower Rhine—stands Arnhem. Between the two rivers is a stretch of flat country about 11 miles across called the Over-Betuwe, better known to 21 Army Group as "The Island."

It is polder or reclaimed land, protected from the rivers by great bunds or banks fifteen to twenty feet high. It abounds in orchards, cherryapple and plum and in the spring looking down from the hills at Nijmegen or Arnhem it is a mass of blossom.

After the first Airborne Division's gallant attempt to capture Arnhem in September, '44, and the wild race of the 2nd Army across Holland to their support had both failed to achieve the supreme goal of turning the Siegfried Line, a line was formed just south of the Lower Rhine (the Northern Arm), stretching diagonally across the Island.

Being overlooked from the hills on which Arnhem stands, this line took a heavy pounding. But it held until the middle of November. At that period the Rhine is in full autumn flood. The Germans, taking advantage of this breached the "bund," flooding the Northern half of the island to a depth of from four to eight feet. This forced the 51st Highland Division back to the centre of the island. The line from then on remained roughly parallel and slightly south of a small drainage canal called the Wetering Wal, which ran parallel to the Northern arm of the river.

Towards the end of November the 49th Division took over this sector of the front and remained in that spot four months. There were two brigades in the line and one in reserve, and they changed places continually. It was an odd defence line, and one which most textbook strategists would have criticised. But most of its oddities were forced upon them by circumstance.

In the first place there were belts of wire, often incomplete, and out of range, due to the fact that the line had changed position. There were mines, both anti-tank and anti-personnel, laid at various times by various units, starting with the 101st American Airborne Div. The charts of these minebelts had for the most part been lost. Then the positions themselves. Before the floods came they were, presumably, the normal Company and Platoon slit trenches. But while 49 Division was there, December to April, the ground was either too wet or too hard to dig. So we took our positions in houses. The line stretched therefore, through a line of villages. Sleeping, cooking and eating took place in cellars—when dry enough—and ground floors were turned into miniature blockhouses.

The whole front was rather precarious, as it depended for supplies and reinforcements on one bridge, across the Waal from Nijmegen. The Germans made various attempts to capture or blow up this bridge. The first was with

some of their famous "Frog-Men" in September, '44, who by swimming down the river with explosives managed to make a considerable hole in the structure. But the bridge is very tough. The hole was covered with two Bailey Bridges, laid side by side, and in spite of constant shelling and very heavy traffic, it remained a firm and useful link—the only one—with the rear. Floating mines were sent down the river by night, but we caught them in searchlights and exploded them before they reached the bridge.

Just after 49th Division took over, the Germans launched a fairly strong attack at the eastern base of our salient. But due to the tenacity of the Duke of Wellington's Regt., who stayed in their houses until their last round had gone, and then—so legend has it—threw household furniture at the Germans, the attack ended with most of the enemy killed or drowned in the floods.

So we watched Arnhem all through December and January, in the bitter cold and snow, looking longingly at the wooded slopes, seeing the sun glint on the dome of the prison there. The worst thing about those four months was patrolling. Very rarely on any front has a patrol gone so heavily equipped. We carried a normal complement of weapons. But there were ladders and boats to be carried in the icy weather, and we had to wear waders when the land flooded again.

We were about a thousand yards from where the German line was presumed to be. But between us there was the canal. In places it was thirty feet wide and eighteen deep, and being flowing water —a drainage canal—it never froze completely. Boats of some sort were always required. On another part of the front, facing up the main road which runs practically straight from Nijmegen to Arnhem, there were three huge breaches in the road. The road runs on an embankment most of the way, so these breaches were full of water and generally had a current running through them. A patrol had always to cross these obstacles before starting any offensive action. One patrol, a company strong, which established itself in the first floor rooms of a flooded village, was supplied by boat every night.

All through the winter, which seemed very long and hard, we went back for occasional rest periods to Nijmegen. The town had been badly damaged by American bombing, by fighting, and by, at first almost continuous, and then sporadic, shelling. But we ran occasional dances there, which were a great success. We shared our rations with the people on whom we were billeted, and received in return much kindness and generosity. They were always ready with a cup of tea and a smiling face, even though the tea was a little weak and the smile a bit haggard. Since they all slept in their cellars, their best bedrooms were always ours for the asking.

We watched rather enviously, throughout January, the preparations for the Reichswald push to the Rhine. But when the time came we found we had our hands full with the fresh flooding of the Island, due to the rise of the Rhine level. February and March found us once again experimenting with new methods of water-borne attack.

Our greatest enemy during the whole period was lack of exercise. Cooped up in cellars all day, and being alert all night did not improve health. Various methods were devised. Frequent changing of companies within battalions, so that the reserve companies, away from direct enemy observation could go for marches, runs, play football and so on. Even in very forward areas, where

possible, we went out for short walks at night. These efforts were very successful, and, combined with a generous allotment of Brussels leave and cinema shows, kept up morale throughout a period of disheartening inactivity.

But at last spring came. By the end of March the floods receded, and the buds began to show in the orchards. The grass where the floods had been shone a lush green. Two brigades were taken out of the line to train. We were to attack Arnhem! We were to avenge 1st Airborne at last!

We cleared the Island with one sweep. The Rhine obstacle was surmounted by sides epping to the East and crossing the Ijssel east of Arnhem. It was beautiful weather, warm and bright. Even the air which we breathed, which had smelled for so long of death and decay, seemed sweeter. After a brief struggle we captured Arnhem and pushed west along the road to Utrecht and Amsterdam. We then had a little time to look round Arnhem and the country of the great September battles.

Arnhem itself is a beautiful town. It overlooks the river, being built on the steep wooded slopes of the northern bank. In the spring it is very lovely. But this spring it was the scene of a desolation which contrasted horribly with its natural surroundings. The whole of the civilian population of the town had been evacuated some months before. Then the Germans with their Dutch collaborators, the Dutch S.S., had systematically looted every single house. When they had finished taking articles of value, they threw the furniture and movables into the street. Many of the houses were badly knocked about. The bridge across the Rhine, the pride of Dutch engineering, was a mass of torn and twisted steel. The railway bridge had been blown in four separate places.

Further west, in Osterbeek and Wolfhezen, there were the signs of an extremely fierce battle. Kit and equipment lay scattered everywhere among the trees in the wooded country above the river. Jeeps stood where they had stopped, stripped of their tyres and electrical parts. Knocked out tanks and anti-tank guns faced each other along roads and lanes. Parachutes still dangled from the branches of the trees. Supply containers lay everywhere, open, empty. Graves were strewn haphazard, some only half-filled.

In one place, evidently a headquarters, we found an unopened box full of official stationery! All this had been there for six months. Rain had soaked it, frost and snow had covered it. Except for the odd German looking for souvenirs it had remained untouched. A memorial to 5,000 very gallant men, many of whom still lie there. But we passed on. Arnhem became a base. A Bailey bridge was erected across the river. The inhabitants began to trickle back and search for their belongings.

The war ended. Arnhem is slowly recovering. The resting place of Sir Philip Sidney and of many other gallant English gentlemen will be remembered in the annals of war and in the tomes of history. But the 49th Division will always see it, in the distance across the floods, its windows glistening in the rare sunlight, the domed roof of the gaol standing out among the lesser buildings and the hill behind covered with red brick houses. They will remember it as the prize they watched for four weary months. They will forget, as all soldiers do, the cold, the damp, the discomfort of those four months. They will remember only spring as it came that year, a great deliverance, a victory, a new birth.

THINGS PEOPLE SAY AND WRITE

- "The most fatal slogan ever invented is 'safety first'.—Mr. Clement Atlee.
- "Railway sleepers of reinforced concrete are now being made by a British firm.".—P.I.B., India.
- "We are at least a year ahead of the world in the jet and jet turbine aeroplanes".—Mr. J. Woodburn, M.P.
- "Nearly 200,000 of our soldiers were killed in the Burma Campaign".—General Kimura, former Japanese C.-in-C. in Burma.
- "In Sweden the private doctor is paid an agreed fee for keeping families well throughout the year".—Mr. G. Bernard Shaw.
- "The theory of atomic structure of matter originated with the ancient Greeks earlier than 470 B.C.".—Professor A. M. Low.
- "Democracy without leadership is like a flock of sheep without a shepherd; but during the war Britain had that shepherd".—Field-Marshal Smuts.
- "There are now 200,000 more people employed in the production of goods for the export market than there were before the war".—"Daily Herald".
- "British shipyards are now building a bigger tonnage of merchant ships than all the rest of the world taken together".—Lloyd's Shipping Register.
- "There are about 65,000,000 people in the British Colonies, of whom about 42,000,000 belong to the different races in Africa".—Mr. Henry Swance.
- "Britain's battleships of the future will fire atomic shells, and her submarines will be equipped with atomic torpedoes".—Editor of "Jane's Fighting Ships".
- "Seventy per cent. of women do not paint their nails, nearly 5 per cent do not use lip-stick, but almost every woman uses powder".—National Shopping Survey, in the U.K.
- "There are still about 800,000 tons of ammunition and explosives dumped in Great Britain; some of the biggest dumps are in the Forest of Dean in South Wales, and in Savernake Forest in Wiltshire".—B.B.C.
- "Treasury note circulation in Britain has risen from about £500 million in pre-war days to about £1,340 million to-day; bank deposits in the country have increased from £2,250 million to £4,860 million".—Norman Crump.
- "When I spoke about the Beveridge Report in the United States I always had to begin by explaining that it was not a plan to enable the people of Britain to retire from work on an income provided by Lend-Lease".—Lord Beveridge.
- "Any chemist's shop in Great Britain can now supply penicillin. It can be used for septic throats, inflamed eyes, infections of the ear and throat, gum troubles. pneumonia and meningitis—under doctor's orders".—Mr. J. Langdon Davies, "Daily Mail".

"The International Fund to operate under the Bretton Woods Monetary Agreement will have a capital of £2,200,000,000; the International Bank, which will arrange the financing of long-term projects, will have a share capital of £2,250,000".—"Daily Mail".

"The British Museum was hit by six high explosives, one oil bomb, and hundreds of incendiaries, so that the building was largely destroyed. It may be years before it can be reopened on the pre-war scale".—Sir John Forsdyke, Director of the British Museum.

"The men of Britain who are being attacked and killed in Palestine to-day are of the same breed as those who released Jewish victims from Belsen and Buchenwald. It was the Germans, not the British, who made war on the Jews and exterminated 5,000,000 of them".—"Daily Mail".

"The density of population in India is only 246 per square mile, compared to 965 in England and Wales.... The average span of life in India is 26 years; in British, 62 years.... India is now the 8th largest industrial country in the world".—Mr. Sidney Jacobson, in a B.B.C. discussion.

"During the War the U.S.A. made available to the rest of the world under Lend-Lease no less than 250,000,000 oz. of silver of which over 160,000,000 ozs. went to India. This silver must, under the terms of the agreement, be repaid in kind over a number of years".—Oscar Hobson, City Editor of "News Chronicle".

"In New Zealand people live on an average for 56 years. In one of the countries through which I passed on my way to Britain people live on an average for 27 years. You cannot have a 68-27 years standard in the same world and still say there will be no more war".—Mr. G. Nash, Finance Minister of New Zealand.

"Thousands of public houses in Great Britain will soon display the golden 'Chinthe' badge of the Chindits. It will tell any ex-Chindit that somewhere near there is an ex-Chindit officer who can help him with his 'civvy street' problems".—Major-General Lentaigne, speaking at the first re-union dinner of the Chindits in London.

"The British 'Auster Arrow' plane will soon be on the market. It will cost £795; running costs will be $1\frac{1}{2}$ d. per mile; it will take off in 80 yards; climb 2,000 ft. in less than four minutes; has a maximum speed of over 100 m.p.h.; a stalling speed of 26 miles m.p.h.; petrol consumption is 25 m.p.g.; and it has a range of 300 miles".—"News Chronicle".

"The British Army—it doesn't matter under which Government it is serving—wherever it is stationed when it is called upon to perform 'police' duties show the same tact, the same forbearance, the same sense of discipline, as does the London policeman. It is almost instinctive in the British soldier not to use unnecessary force".—Earl Winterton, M.P.

"The Royal barge used by the King and Queen during the Victory procession on the Thames is a remarkable craft. Built in the 17th century, it is as watertight as ever. About 40 ft. long, with canopied seats at the centre, it carries a brass plate on the stern engraved 'Barge built for Queen Mary by William III in 1689' It is navigated by eight watermen."—"Evening Standard".

"The new No. 1 Army Uniform, recently inspected by the King and Queen, is a dark blue, with piping in regimental colours. The head-dress is a beret with

regimental badge, but for ceremonial occasions a peaked cap and a scarlet belt may be worn. For rifle regiments the colour of the uniform will be green; for the King's Royal Rifle Corps black; and for Highland regiments, dark piper green".—B.B.C.

"Yesterday Mr. Geoffrey de Havilland flew back to this factory a small tail-less machine called the Swallow. It is the first time a swept-back wing machine has been successful in this country. It is jet-propelled, and this prototype is going to lead us into a very great future in aeroplane development". Mr. Arthur Woodburn, M.P., speaking at the De Havilland Aircraft Company's Factory at Hatfield.

"The best recruiting sergeant is not the fellow with the ribbon round his hat, but the Regular soldier who, at the end of his service comes out and can look the world straight in the eyes, is proud of the Army of which he has been a member, and can say to his sons, his relations and his young friends: 'Go along, my lads, go and join as I did. I only wish I had the chance again".—Colonel G. E. Wigg, M.P.

"More than 250,000,000 of Britain's new 'peace' stamps are being printed. They are of two denominations— $2\frac{1}{2}$ d and 3d; the former has illustrations of a trator, a ship, a fire station and two workmen's houses, representing agriculture, transport, industry and building; the latter has illustrations of a set-square and dividers, and a bricklayer's trowel and bricks, representing planning and reconstruction".—B.B.C.

"As a compensation for its losses and sufferings during the war, the British Commonwealth has immense assets, mostly of the imponderable kind. It has a tough stock, hardened and purified by experience and adversity, a strong social system, a unique democratic constitution, a high faith in human idealism, the saving sense of humour, and, like some vast geographic nervous system, it lies spread over the globe, drawing and supplying energy and power everywhere".—Field Marshal Smuts.

"In order to purchase arms and war materials in overseas markets, Britain sold no less than £1,118 million pounds worth of her foreign investments. Britain's vital export trade was cut to one-third of its pre-war value so as to release shipping space for transport of war materials from abroad and to free factories and workers for the manufacture of these materials into armaments".—An economic correspondent of P.I.B.

"In ratio to population, the Canadians are lending Britain about four times as much as the Americans".—Mr. J. B. MacGeachy, B.B.C.

"After the occupation of Germany discoveries made by the Allies showed that the Germans had progressed farther than either Britain or the United States in rocket propulsion at the time the war ended".—"News of the World".

"In the future Army there will be four technicians to every fighting man".— General Crocker.

"We have developed a revolutionary type of motor tyre. It has no inner tube, and so cannot be punctured in the ordinary way. On test these tyres covered the amazing distance of 14,500 miles without failure, and were calculated to have a potential life up to 30,000 miles."—Mr. H.L. Kenward, President of the Tyre Manufacturers Conference, London.

WAS OUR PRE-WAR TRAINING WRONG?

By LIEUT.-COLONEL W. H. HUELIN.

DISCUSSION in the Mess a few nights ago turned on the subject of the U.S.I. Gold Medal Essay Competition of a couple of years ago. There seemed such diverse opinions that I venture to submit this article in the hope that it will stimulate further thoughts on the subject, and that its contents may be of value to those charged with the responsibility of framing post-war training.

It will be recalled that the subject set for the Competition was:

"In the past it has been the policy that the training of the armed forces of the Empire should not be related to any particular type of terrain. Discuss this policy in respect of both land and air forces, in the light of experience gained in the present war."

The first sentence of the above paragraph is used as a statement of fact, but on examination it will be found that the practice of the past does not altogether qualify that statement. Let us obtain a clear and correct picture of the case by examining how and where our fighting forces did exactly receive their training in the past.

The British Regular Army and Territorial Force were trained chiefly for a war on the continent of Europe, a good deal of attention being naturally given to combined operations, a somewhat special subject. Moreover, as the Army was working on the Cardwell System, many Regular units had experienced training in different parts of the Empire but mostly in India, thereby, as will be clarified later, receiving training in a tropical climate and in varying terrain, in most cases quite different to that found on the European continent.

The Dominion and Colonial Forces, in which are included those of Canada, New Zealand and Africa, carried out training in terrains peculiar to their respective countries. These, it will be accepted were of varied natures—that carried out by our colonial forces of East and West Africa especially so—namely jungle warfare; and from there came leaders and many men to help us fight the Japanese in the jungles of East Asia.

The Army in India trained, and had experienced warfare in, ground of widely different kinds. Those units employed on the North-West-Frontier had had much training and some fighting there. Many units of the Indian Army, especially the old Piffer ones, considered themselves specialists in that type of warfare; and well they might. There also existed an Eastern Frontier Force and a Burma Defence Force, trained for and experienced in fighting in the jungle tracts to be found in India's Eastern borderlands.

The last of the British land Forces to be considered are those units of the British and Indian Armies that were scattered in the more out-of-the-way parts of the Empire; Malta, Egypt, Aden, Singapore, China, Burma and few other places. In some there may not have been sufficient troops to carry out training higher than that of the Battalion, but nevertheless, experience in training over divers natures of terrain must certainly have been obtained by those stationed there.

So far no mention has been made regarding the training of our Air Forces, but briefly put, our home Air Force, such as existed, was trained for operations in support of our Expeditionary Force, while that portion out in India often supported our troops operating in the mountainous country of the N.W.F., and that stationed in Egypt, Aden and Iraq trained and operated in desert country.

Sufficient has been mentioned above to show that although training in varied terrain had not been definitely specialized in, yet in actual practice, much such training and experience had been gained prior to the outbreak of the present war. It was the presence of other factors that to a great extent neutralized the value of that training, and which are to be guarded against in our post-war system if we are to have suitable forces ready for use against potential enemies when and wherever they may in future appear.

The other factors alluded to were two in number. First, our general national apathy towards the looming war-clouds, and secondly, the economic stringency placed on all matters that are required for the building up of a really efficient fighting force. These two factors combined rendered the production of the right type of leaders, and men with modern battle equipment, wellnigh impossible, and resulted in the land and air training of our forces being executed on out-of-date and hence unsound lines.

It is more than likely that had we been more alive to the world situation and developments in modern armaments, the supposed failings in our pre-war training system would never have appeared at all. Our soldiers and airmen with up-to-date weapons in their hands and their leaders minds trained to work in proper channels for battle under present conditions, would have done justice to their professions in whatever part of the Empire they might have been called upon to act.

Reports of our Intelligence Service would have been credited, and sufficient time would have been given to our General Staff to make proper preparations to meet the emergency. No policy or system of training that had our pre-war economic and mental background and outlook could have been reasonably expected to produce troops fit to engage an aggressive, modern equipped, and trained hostile present-day first-class Power, with any hope of success. It would therefore be unfair to attach all the blame for our ill-success in the opening phases of the present war to our pre-war training policy and system.

THE LESSONS TO BE LEARNT.

Let us now examine the experiences of the late war in the different theatres of operations:

Case 1.—The fighting in Poland, Holland, Belgium and France showed us the superiority of well-trained modern armoured land forces, employed in conjunction with modern ruthlessly operated air forces and battle-trained minds, over our own and allied troops, still labouring under a last-war mentality and provided with little armour and much out-of-date equipment.

Lesson 1.—Our future land and air forces must be trained and equipped on modern lines.

Case 2.—Norway showed us the futility of committing ill-trained, poorly equipped troops, insufficiently supported from the air to operations in difficult country against a prepared enemy.

Lesson 2.—"Special troops with special equipment are required for operations in country of a particular nature."

Case 3.—The battles in Italian East Africa were won by troops that had received no highly specialized training although perhaps not against a fully determined enemy. They were, however, over varying terrain and fought out with weapons with which our pre-war army was normally equipped.

Lesson 3.—"Our arms and equipment being approximately equal to that of the enemy, our pre-war trained soldiers and airmen showed that they could produce success in battle."

Case 4.—The initial stages of the North African campaign give a similar lesson to the last, but with the entry of the Germans into the African picture, namely, the appearance of properly handled modern equipped and trained forces, a change of fortune was produced and we were soon with our backs to the wall at El Alamein.

Lesson 4.—Superoir weapons will often decide the issue in battle.

Case 5.—A reversal of the fortunes of war is next seen in our glorious advance to Tripoli, and the subsequent surrender of the enemy in Tunisia brought about by our battle-hardened troops having to hand ample modern equipment and a powerful air force to support them.

Lesson 5.—"Well-trained troops with an ample supply of first-class weapons and equipment, combined with air superiority over the enemy, will give decisive results."

Case 6.—The defeats we suffered in Hong Kong, Singapore and Malaya were not the results of bad training in the true sense. They were the outcome of the same unpreparedness and irresolution as previously mentioned in the opening phases of the War in Europe, when we were there in a like manner faced by an aggressive resolute and fully prepared enemy. The campaigns in Burma, with our loss of Rangoon and retreat through the Burmese jungle to India, were also a product of our unpreparedness and indecision and not the results of bad training. In these, however, there came to light a weakness in a particular type of warfare to which we, in pre-war days, had given little serious attention; namely, jungle warfare.

Up to then our jungle wars had been restricted to fights against a semicivilised, poorly armed, enemy; of warfare in jungle-country against suitably equipped and well-trained troops of a modern first-class Power, few of us had little dreamt. For this failing the blame cannot justly be laid against our training policy or soldiers generally, but again rather to our narrow pre-war national outlook towards military matters. This and an unsatisfactory political situation had no doubt brought about a moral depression in the Indian Army which had affected the fighting qualities of our leaders and troops.

Lesson 6.—"In this case adequate troops accustomed to operate in jungle were not at hand when required, nor was the preparation and organisation for defence of areas thickly populated by Asiatics, properly understood."

Case 7.—The operations of our Dominion Troops in New Guinea went to show how, when we had there brought together resolute and suitably equipped troops with adequate air support, we were able to transform a back-to-the-wall situation, somewhat similar to that at El Alamein, to a brilliant advance over difficult ground through jungle-country that culminated in the enemy being driven into the sea as an alternative to surrender.

Lesson 7.—"The ability of the right kind of properly equipped troops to turn the scales in a campaign."

An altered map of the world will indicate to us where our future battles may have to be fought, and our experiences in the late war should show us what different forms of training will be required in such places, but no matter what carefully planned system of training we may choose to adopt, neither will the information gained in the late war, nor will any new system of training be of avail, unless we keep our minds alert to the worldwide varying situations caused by the continual changing mentality of mankind and the improvement and innovations in weapons and machines.

We must resolve to give our fighting forces of the best we can produce and also our full moral support, that they may feel that it is on them and their proficiency that we are dependent for our survival when faced with danger.

THE SYSTEM SUGGESTED

Although it has been shown that prior to the late war we did have some parts of our forces trained to fight in particular kind of terrains, our experiences now have brought out the importance of having very highly specialised troops trained for battle in those particular terrains.

To meet this demand we must in future have at least a nucleus of specialists so skilled; experts in Combined Operations to study the problems involved in landing troops on to hostile shores; experts in Jungle Warfare to tell us how to combat nature as well as the human enemy in such regions, and also how modern inventions may be best used to assist us there. Our experts in Desert Warfare will be required to discover the antidotes to the difficulties met with when campaigning in hundreds of miles of sandy wastes in a torrid climate, and how vital blows may be struck there at a less prepared enemy.

May it never be that our future world will necessitate these experts and their deadly instruments being called into action, yet, were it ever so necessary, then we would have at hand the means whereby an aggressive belligerent would be at once checked and ourselves probably saved from having to shed great quantities of our blood and treasure in fighting out another long war.

As in other professions, so does each special type of military subject need a centre where all details affecting that type may be studied by experts. All new ideas and material accessories of the particular type of warfare should be brought to that centre for examination and experiment. These centres should take their shape in specialist Training Schools. Besides a purely teaching side there will need be a "G" side concerned with keeping the teaching up-to-date with the latest information received on the tactics, new weapons and equipments connected with their particular problems.

The following types of schools will emerge:

Mountain Warfare School; Town, Village and Street Fighting School; Desert Warfare School; Coast Attack School; Jungle Warfare School; and Arctic Warfare School.

Such schools would be set up in country where the terrain is correct for the specialised type of warfare as taught in them. Considerable numbers of troops must be stationed nearby who would be recognised as specialists in that particular brand of warfare. These would be armed, equipped and clad according to their roles. They would remain stationed there indefinitely, and should bear designation titles such as :—5(Mtn) Bn. Royal York Regt., 7(Coast Attack) Bn. Royal Lancaster Regt. etc. All officers and many N.C.Os would be required to pass through their school, and refresher courses would be held.

These schools would give instruction in the details of all the minor operations affecting the main subject taught. For example, the Coast Attack School would instruct in the use of assault craft, the beach organization, the advance and attack on to enemy strong points, the consolidation and maintenance of positions gained. Troops of all arms would be required to attend.

In the staff of the school the staffs of the formations in the area would circulate as instructors or experimental specialists, while the formations working in the area would be required to pass on to the school the results of any practical tests carried out by them in training exercises. The teaching at the school would thereby be kept abreast of the latest ideas and be closely knitted to what was being carried out in practice.

In the event of a threat of war in any particular theatre G.H.Q. would have at its disposal through the above organization a nucleus of troops highly trained and properly equipped for immediate operations in any role in varying terrain, and also the wherewithal for a rapid expansion of any specialist force.

The late war showed the importance of specialized training schools, and it will be argued that certain specialist schools already existed before 1939. The point here advanced is, however, that schools by themselves are inadequate, as they become staffed by personnel who often have a theoretical knowledge only of their special subject, and have a tendency to become academic, theoretical and to labour out-of-date ideas. It is essential that the specialist school be linked up with the troops whose operational role it is concerned with.

The troops themselves should be periodically subjected to exercises of a severe nature at which men, clothes, equipment and weapons would be thoroughly tested. During such exercises the experimental staff of the school would be required to attend. G.H.Q. would also be required to send its representatives, in order that the ideas of the Higher Command might be brought into line with the latest developments in that particular type of warfare, and obtain the correct mental picture to enable them to meet the requirements of commanders, operating in particular theatres.

It is not intended that our forces should be divided off into watertight compartments. General warfare units would still continue and the technical schools of the various arms would remain, but, in addition to those, a number of specialist formations with their kindred schools would be instituted.

An important point in training that must not be omitted is that of the value of training literature. Well-written and illustrated booklets are of immense value, especially during the period of expansion of the forces. In the past, training manuals have had little appeal to other than the military scholar; in fact they have been so ably condensed that a non-military trained mind would have difficulty in following them. Let the future military literature be therefore of a more vivid character, and more on the line of the various military pamphlets that were prepared and published during the late war.

As for our land forces, so will it have to be for the training of our air forces. Air operations over jungle country calls for special training both as regard general bombing of enemy targets and for the close support of our ground troops in that type of country. Specialization in many other branches of aerial warfure would certainly be also recommended, but how far that had already been carried out in the past and what the detailed requirements are, the writer is not in a position to state accurately. Task forces were set up during the war, and

it is known that these were always very highly trained for each particular undertaking. It is thought that the future training policy of our air forces should certainly include whatever specialist training that may be required to carry out those special tasks, both independent and in conjunction with our land forces, that are considered as likely ones in the event of another war.

All the battles of the war, and the lessons to be learnt from them, showed the tremendous importance of weapon mastership. All technical schools, units and individuals, whatever weapons they are concerned with, must have the highest possible degree of skill in their use. To acquire that degree of skill troops must be battle-minded and fighting fit. Therefore let us have in our post-war armies more of the "bullet and bayonet" and "bully beef and biscuit" spirit and less of the "walking out dress" and "milk and lemonade" atmosphere that was allowed to pervade in pre-war days.

It is not proposed to enter into details regarding the general training as carried out in units. This will, to a great extent, be governed by the system as already suggested above. There are, however, strong reasons for outlining some system by means of which weapon-training and other individual training may be improved.

Generally speaking the standard of weapon training and some other branches of individual training attained in peace-time, especially in some Indian units, left a good deal to be desired. In many it has been left to the Annual Weapon Training Courses, preceded by a ten days preliminary weapon training period, to produce the desired standard. On the completion of their annual W.T. Courses ranks were seldom required to fire a shot until the following year, and therefore gave little further attention to the matter until then. A system whereby great improvements in such training was obtained in an Infantry unit is therefore worthy of description. The system is especially applicable to service under peace-time conditions, when weapon-training is spread over a greater part of the year and occupies a prominent place in a unit's annual activities.

The system is briefly as follows:--

A "Unit Weapon Training Committee" is formed, consisting of the 2nd-in-Command, the Subedar Major and a Unit Weapon Training N.C.O., the latter being a man who has distinguished himself at a W.T. School. The Unit Intelligence Officer may also, or in place of one of the above, be included. The business of this Committee is to test each company every quarter in all its weapons. This may first appear as a very formidable task, but in reality can be accurately and quite expediently carried out if the following method is adopted.

Each fortnight one company is taken and a fixed number of ranks from each platoon selected at random; say twenty. Each platoon is made liable to be tested in any weapon or subject. If, for example No. 7 Platoon is selected for the rifle test, then twenty other ranks are extracted, and each man required to shoot a given number of rounds from a fixed distance at an appropriate target. A qualifying standard having previously been decided on, each man that qualifies counts as a point for his platoon.

The next platoon is then taken and tested at an appropriate test with the L.M.G., and then another in a grenade accuracy and distance throwing test with dummy grenades. Finally Tommy Gunners, Anti-Tank Riflemen, personnel armed with the pistol and 2-inch mortar gunners are tested. The aggregate ranks that qualify at the different tests gives the company's figure of W.T. merit.

An additional test that may be included is an Assault Course Test. For this any platoon is called on to cover the assault course. Style, time taken and physical condition at the finish decide the points earned. The latter test is not so easy to mark but is well worthwhile including. Tests in mine-laying, camouflaging and rapid wiring, etc., may be similarly conducted for the platoons of the H.Q. Coy. The standard of each test should be raised from time to time until a really creditable one is reached.

The testing of each platoon should not take longer than half an hour once the layout has been made and the scheme got going. A Company can therefore be tested in some eight subjects in approximately four hours and, as the Committee has a fortnight in which to test each company, it will be realized that when the tests are spread over that period, they can be very easily fitted into any sub-unit training programme. At the end of the quarter the company with the highest figure of merit should be proclaimed the best W.T. Company for that quarter and allowed to carry a W.T. badge or some distinction on its Coy. flag or be recognised in some other suitable way.

The value of this system has been proved in practice, and the results obtained were really astonishing. It not only tended towards attaining a high uniform standard in the unit, enabling the C.O. to see at a glance the capabilities of any of his sub-units at any branch of training at any time, but also struck at the root of the matter, namely the individual man, as every rank was every three months forced to show whether he was a liability or an asset to his sub-unit and therefore strove to overcome his defects. The competitive spirit and esprit de corps in sections, platoons and companies was raised, and a real live and continued interest in a soldier's main job was kept up throughout the year.

As regards the system of recruit training, that which existed in India prior to the late war and continued during it, whereby the newly-joined soldier received his initial training at an expandable Training Centre that supplied reinforcements to a Group of Active units, did, on the whole, prove satisfactory. The addition of battalions for more advanced training, special and otherwise, was a useful adjunct, but could probably be dispensed with in peacetime without affecting the efficiency of Active Battalions. The value of these Advanced Training Units is, however, great in wartime, and a note for their re-introduction in the event of a future big war should be made.

Under peace conditions the normal Training Centre can cope with small parties carrying out post-recruit training, and these can easily be periodically absorbed and brought up to trained soldiers standard in the Active Battalions later. In wartime, however, the case is somewhat different, as, not only has the Training Centre many more men to deal with, but it is often located in an area where ground is not available for carrying out advanced training. Advanced Training Units can, on the other hand, be stationed in country that is suitable for training in the particular type of warfare that their respective Active Battalions require men trained in. These are strong arguments in favour of such battalions being considered as important for inclusion in our future training system.

There will always be many obstacles to the introduction of any new system, whatever that chosen system may be, but to enable any training system to have a chance of proving itself successful in wartime it is once again stressed that it is of vital importance that the nation should continue to give the fighting forces its whole hearted moral and material support in peacetime.

For their own part our forces cannot go far wrong in their training if the object of training, as laid down in I.T. Training for War, 1937, Chapter III, Sec. 8, is kept in view and always aimed at, namely:

- I. To produce in the individual: A formidable fighting man like an expert hunter, always alert and seeking an opportunity of striking at his quarry or watching his movements with a view to future opportunities, confident and expert in the use of his weapons, skilled in the use of ground and able to stand fatigue without undue loss of efficiency.
- II. To produce in the unit: Control and flexibility like a good machine, each part working smoothly and in harmony with the remainder to achieve the object of the commander.

Helping Disabled Indian Servicemen

Established in 1917, Queen Mary's Technical School for Disabled Indian Sold ers at Kirkee has now taught nearly 3,000 Indian Servicemen a useful trade, thus enabling them to earn a livelihood in the outside world.

The school is open to Servicemen of the R.I.N., the Indian Army, the R.I.A.F., Imperial Service troops and Military Police who have been invalided out of the service as unfil for further military duty. While undergoing training disabled men are provided with uniforms, food, bedding and other necessities, as well as an allowance of Rs. 8 per month.

Courses at the school vary from six months to two years and each man is free to elect the trade he wishes to learn. After he has undergone the prescribed course of instruction he is examined and on passing, is awarded a diploma.

Among those who have qualified and received diplomas from the school during the 29 y ars of it: existence are 1,083 automobile drivers, 821 oil engine drivers, 255 tailors and 46 electricians. As a sideline many garments and materials are manufactured by trainees for customers in all parts of India and each student is paid for the work he turns out.

Ex-Servicemen's Co-operative Society

More than 5,000 ex-Servicemen have joined the Chakwal Ex-Servicemen Welfare Association, recently inaugurated at Chakwal, Jhelum district, Punjab. The Association, a non-communal and non-political organisation is planning for the economic uplift and social welfare of ex-Servicemen and their dep ndents and will work in close touch with the District Soldiers', Sailors' and Airmen's Board and with the local Labour Exchange.

"Self Help" is its motto and this Association is forging ahead with a programme which includes employment information bureaux, an institute and a hoste for ex-Servicemen's sons. Another st p towards "Self Help" is the Chakwal Ex-Service Co-operative Sale Society Ltd. which is to stock and sell to ex-Service personnel controlled articles and farming items. It will also collect and market ex-Servicemen's produce, both agricultural and indust ial.

So far Rs. 50,000 have been subscribed to the society, membership of which is restricted to ex-Servicemen, including officers. A Motor Transport Co-operative So iety is also to be started and a Construction Co-opera ive Society is being planned.

NEW PAY CODE FOR THE BRITISH SERVICES IN INDIA*

BY MAJOR-GENERAL J. B. DALISON, O.B.E.

ANNOUNCEMENTS in the Press have told you that from 1st July, 1946, the British Services in India come under the new U.K. pay code and the U.K. income-tax code. The principles and most of the details of the new U.K. pay code were given in two White Papers (Cmd. 6715 and Cmd. 6750) issued by H.M. Government in December, 1946 and March, 1946, and also in the pamphlet on the subject (8431—A/W. 5) recently issued by the Government of India.

What are the reasons for the change in the pay and tax codes? Up till now India has always had her own pay code for the British Service as well as for the Indian Army. That code has been subject to Indian income-tax, and on the whole people have been very well satisfied. Why is it necessary to change it? The reason is that the machine which worked well enough in peace did not work well in war.

Let me take your minds back to the time when India became a base for S.E.A.C., and British troops arrived in India in larger numbers than ever before. Every time a reinforcement arrived he had to be brought on to a new pay code. This presented no great difficulty in the case of the B.O.R., but it was a most cumbersome business so far as officers were concerned, and every individual, officer or other rank, had to have his income reassessed to a new tax code.

Strictly speaking, when these reinforcements left India for operations afield, they should have been changed back again to the U.K. pay and tax codes. This, however, was found to be administratively impossible, with the result that they were left on the Indian pay code. As a result, British troops throughout S.E.A.C. and in Japan were being paid under the Indian pay code, though some of them had never set foot in India. This was obviously illogical, and naturally H.M. Government wished as soon as possible to gather within the fold again the British troops in S.E.A.C. and Japan.

July 1, 1946 being the date of the introduction of the new U.K. pay code was an obvious date from which to make the change. After much discussion, it was decided that, in order to facilitate accounting, British troops in India should be brought into line with British troops throughout the rest of the world from that same date. Simplicity of administration is thus the reason why you are governed by the U.K. pay and tax codes from 1st July 1946. This simplicity of administration is a very vital factor. It is certainly calculated to give less cause for grumbling about slowness in settling up accounts, and officers who during the war have been extremely slow to grasp the intricacies of the Indian pay code will no longer have reason to concern themselves with more than one pay code.

The New Pay Code as it affects B.O.Rs.—Hitherto B.O.Rs in India have drawn U.K. rates of pay, converted at the concessional rate of exchange of ls. 4d. to the rupee, instead of at the standard rate of ls. 6d. to the rupee. In effect,

^{*}In this lecture, given in Delhi recently, General Dalison, who is a member of the Post-War Pay Committee, spoke only from the Army point of view. Generally, since the new pay code has been drawn up on an inter-Service basis, what applies to the Army applies equally, rank for rank, to the Royal Navy and the R. A. F., though there are some minor exceptions to this.

this has given them a $12\frac{1}{2}\%$ addition to their U.K. rates of pay. Elsewhere in the world B.O.Rs have drawn U.K. rates of pay, and in countries where the cost of living was deemed to be higher than in the U.K. thay have also drawn colonial allowance.

That is the treatment they will now receive in India. They will draw the appropriate rate of pay as given in the White Paper, plus Local Overseas Allowance appropriate to their rank. A formula by which to calculate their war excess while giving them full credit for the $12\frac{1}{2}\%$ extra now drawn in India was thus easy to achieve. It is shown in Appendix "A".

Rates of Local Overseas Allowance are given in Appendix "B". The married rate of this allowance is not admissible to an individual whose family is not in India. This must obviously be the case, since the object of this allowance is to meet the extra cost which is inherent in living in India. I will deal later with the Indian Transitional Allowance, which is shown in the same Appendix.

What is the position of married B.O.Rs, in so far as they especially are affected? Under the new pay code the marriage allowance for B.O.Rs as well as officers has been fixed at a figure which is intended to include provision for rent of a house and all allied charges. The married B.O.R. whose family is in India will therefore in future have to pay rent for his furnished married quarters, and will also have to pay for his fuel and light. Rent charges will be at standard world-wide rates, which have not yet been fixed. For B.O.Rs, war excess on marriage allowance will be calculated exactly as stated in the White Paper. In addition, B.O.Rs whose families were in India on 30th June 1946 may elect to remain on Indian rates of marriage allowance, with all that those rates imply in the way of free housing, separation allowance, etc.

If, however, this election is made, the married rate of Local Overseas Allowance will not be admissible as it is already included in the marriage allowance; allowances equal to those under the Family Allowances Act will not be admissible as children's allowances are already admissible; and the qualifying allotment will be subject to the rules in the White Paper.

How does the new pay code affect officers?—Under the Indian pay code all officers received an inclusive rate of pay from which, together with lodging allowance, they had to provide all their requirements, including servant and food. The inclusive rate naturally included elements to provide for this. The system was well enough understood before the war, but officers who arrived during the war showed a most unfortunate reluctance to understand that their pay in India was inclusive, and there was much grumbling that they were not given free rations, and that a deduction was made from their pay when a batman was provided. These grievances will disappear now that the same pay code applies to them in India as in the rest of the world.

Under the new pay code the married officer receives his pay, his marriage allowance, and his Local Overseas Allowance; he receives no provision in kind other than his rations (or ration allowance in lieu) so long as he is living with his family or separated from them otherwise than by the exigencies of the Services. From these empluments he is expected to make all provisions for himself and for his family.

The single officer—and this term includes the married officer separated from his family by the exigencies of the Service—will receive considerable provision in kind or allowance in lieu. He is entitled to free (i) rations, (ii) furnished accommodation, (iii) fuel and light, including fans, (iv) water and (v) servant.

When Government cannot provide him with accommodation, he will receive Composite Lodging Allowance, which is taxable, at the rates given in Appendix "C", and will be required to make his own arrangements including provision of his own servant. When Government cannot provide him with rations he is, of course, entitled to ration allowance, which is not taxable; and when Government can provide him with accommodation but when a batman is not authorised in establishments and is not provided, he will receive servant allowance. Servant allowance is taxable, and the rate has been fixed at 2s. 6d. per day. So you will see that the single officer is entitled to considerable provision in kind or to allowances in lieu.

War Excess—Officers.—The formula to be adopted for calculating the war excesses for officers presented a pretty problem. First, should pay and marriage allowance be taken separately as in the White Paper, or should they be lumped together? There was considerable discussion in London on this point between representatives from India and from the Service Ministries, and eventually it was decided to lump pay and marriage allowance together.

Secondly, in determining the formula it was necessary to decide how the comparison should be made between Indian inclusive rates and the new rates, which include provision in kind. The results are shown in Appendix "A". Let us first take the case of single officers, and examine the credit side. Lodging Allowance had to be included, since the composite lodging allowance on the other side naturally contains a lodging element. Indian Army allowance was excluded, as it will continue in issue to entitled persons, though possibly in a new form. Japanese Campaign Pay was excluded, as it ceased from August 16, 1946. Local allowances I will deal with later.

Turning to the debit side, half the composite lodging allowance plus ration allowance offsets equivalent items in Indian inclusive pay. Local Overseas allowance also offsets a similar item. Half composite lodging allowance only is taken into account, since certain irrelevant items contained in it had to be ignored.

Entertainment allowance offsets an equivalent which is included in Indian "command" rates of pay. Entertainment allowances for Lieut.-Colonels and Brigadiers are given in the White Paper. The rates for Major-Generals and above have not yet been fixed by H.M. Government.

Entertainment allowance is, of course, only admissible to officers who are in command. It is not taxable. Both Lieut.-Colonels and Colonels obtain benefit here, in that entertainment allowance is not taken into account on the debit side in calculating their war excesses. I may say that, if the debit side exceeds the credit, the balance is not deducted from the individual's new rate of pay. In calculating war excesses, conversions between rupees and sterling are made at 1s. 6d. to the rupee.

Having settled the formula for single officers, it was easy to deal with married officers; it was just a case of adapting the "single" formula to meet their particular circumstances. You can see the result in Appendix "A". Half composite lodging allowance is not deducted in the case of the last category, because they have no entitlement to treatment as single officers. Local Overseas Allowance is paid at the married rate only to those whose families are in India. In India, rates of Local Overseas Allowance remain the same whether the officer is or is not accommodated by Government. This decision, I may add, was arrived at after very careful calculations.

Indian Transitional Allowance.—By means of war excesses, individuals are protected in the gross emoluments which they were drawing on June 30, 1946. War excesses do not, however, protect them in their net emoluments, owing to the generally heavier impact of U.K. income-tax. To give protection against this heavier tax impact, Indian Transitional Allowance has been introduced. The rates are shown in Appendices "B" and "C". The allowance is tapering, i.e., it is subject to periodical reduction and ceases altogether on March 31, 1950. It has been calculated on a broad basis.

Representative cases were taken in each rank, and the allowance fixed accordingly. Captains, subalterns and privates do not receive it, because they do not need protection. The allowance is to be given at the same rates to married and single, and to those who arrived in India after July 1, 1946, as well as to those who were in India on that date. The allowance is taxable. It cannot be drawn in addition to the supplementary marriage allowance mentioned in the White Papers, but the more favourable of the two allowances may be drawn.

Abatement of War Excesses.—War excesses are subject to reduction on the rising tide principle as described in the White Papers; that is to say, on the individual being promoted or receiving an increment of pay for any reason. They are also reduced in other circumstances, such as on vacating an appointment carrying staff, additional or command pay. Full details of these points will be given in the implementing orders.

Almost all forms of extra duty pay and additional pay, including staff and command pay but excluding parachute pay, are abolished under the new pay code. Qualification pay is introduced for certain officers of the rank of Major and below.

Miscellaneous Allowances.—Bombay and Calcutta compensatory allowances will continue in issue at their present rates. The allowances given in Delhi to B.O.Rs of G.H.Q., but to no others ceased as from July 1, 1946, but existing incumbents will continue to receive it so long as they remain eligible under the existing rules. There are a few other allowances given to individuals serving in particular localities—some sanctioned nearly fifty years ago. They ceased as from July 1, 1946, but existing incumbents have been protected. Travelling allowance will continue in issue under Indian regulations. The recovery of hospital stoppages will be governed by U.K. regulations.

Further Points.—British Service officers attached to the Indian Army are covered by the new pay code. This may cause some inconvenience for a period, since they will be entitled to provision in kind, which is not admissible to Indian Army efficers.

It may well be asked why there are so many gaps in the new pay code. Let me say at once that the fault does not lie with India. H.M. Government set up a committee in the U.K. in April, 1945 to frame a new pay code; the White Paper on B.O.Rs pay was issued in December, 1945, and was followed by the White Paper on officers pay in March, 1946. Since then the committee has been busily at work filling in the gaps. But the introduction of a new pay code is a complicated business, and it seems that the fifteen months allotted was not sufficient.

Another question which may be asked is: Why was the decision to bring the British Service in India on to the new pay and tax codes from July 1, 1946, not announced until nearly the end of May? The answer is that the decision as to income-tax could not be taken until after the middle of April, and it could not well have been announced before the measures to meet the consequences of

this decision had been worked out in detail between H.M. Government and the Government of India. A small deputation was sent from India to the U.K. towards the end of April to hammer out these and other details with the India Office, the Service Ministries and the Treasury. Three weeks of complicated, but in the long run profitable, discussions took place, and well within a week of the deputation's return to India all the agreements reached in London had been approved by the Government of India. On the whole it was pretty quick work.

Conclusion.—I have intentionally not attempted to compare the net emoluments of individuals under the new pay and tax codes with those under the existing code. It would be virtually impossible to do so, as so much depends on the circumstances of the individual. For instance, would he be entitled to any War Service Increments? If so, how many? Is he drawing Corps/Command/Staff or other form of additional or extra duty pay, and if so, at what rate? Is he married? If so, has he any children? What are their ages? Is his family in India? Is he living with his family or separated from it? If separated, what are the circumstances of his separation? All these questions mean a different answer in comparing net emoluments under the two pay and tax codes.

Two explanatory pamphlets (one for B.O.Rs, the other for officers) have been issued by the Adjutant General, and these should enable individuals to work out their position under the new code. Each pamphlet gives some guidance in calculating the U.K. tax to be payable, but two important points must be remembered: Marriage allowance will not be taxable under the new code in this financial year; and Officers, when assessing their position under the new code, must remember that they receive provision in kind under that code.

New Campaign Medals

The India Service Medal will be granted to British and Indian personnel of the Royal Indian Navy, the Indian Army (including civilians in military employ), the Indian States Forces and the Royal Indian Air Force, for three years' non-operational service in India between 3rd September 1939 and 2nd September 1945. The conditions under which civilians other than those in military employ may wear the medal have not been finally decided.

The ribbon of this medal has a narrow light blue stripe in the centre with alternate dark, light and again dark blue stripes on either side. The medal is an alternative award to the Defence Medal and no one may wear both. It will not be admissible to British Service personnel.

The War Medal will be granted to full-time personnel of the Armed Forces for a minimum service of 28 days, wherever the service during the war has been rendered. The ribbon is in the red, white and blue of the Union flag. It has a narrow central red stripe with a narrow white stripe on either side and broad red stripes at each edge, the two intervening stripes being blue.

Those entitled to the Oak Leaf for "Mention in Despatches" will wear this emblem on the War Medal ribbon. The medal will be granted in addition to any others to which a person may be entitled.

APPENDIX 'A'

WAR EXCESSES

RUPEE EMOLUMENTS ON 30TH JUNE LESS NEW EMOLUMENTS.

ALL B. O. R's.

Total Emoluments

EXCLUDING

Marriage Allowance Separation Allowance

(if in issue)
Local Allowances.

J. C. P.

Pay under NEW U.K. CODE. Single rate of Local Overseas

Allowance.

SINGLE OFFICERS.

Total Emoluments

INCLUDING EXCLUDING

Lodging Allowance.

I. A. Allowance (if in issue)

Local Allowances.

J. C. P.

As above PLUS

Half Composite Lodging

Allowance

Ration Allowance at 3 Shillings per day. Entertainment Allowance

(Brigs. and above only)

(if admissible).

MARRIED OFFICERS

(FAMILY NOT IN INDIA).

Total Emoluments

INCLUDING

EXCLUDING

Lodging Allowance

(Single rate)

(Single 1880)

Marriage/Family Allowance.

I. A. Allowance (if in issue)

Local Allowances.

J. C. P.

As above PLUS

Marriage Allowance.

MARRIED OFFICERS

(FAMILY IN INDIA BUT SEPARATED BY EXIGENCIES OF THE SERVICE)

As above PLUS
Separation Allowance
(if in issue)
but with Lodging Allowance
at married rate.

As above but Local Overseas Allowance at married rate.

OTHER MARRIED OFFICERS (FAMILY IN INDIA).

As above but Separation
Allowance will NOT be in ssue.

As above but EXCLUDING
Half Composite Lodging
Allowance.

APPENDIX 'B' SHILLINGS PER DAY

MISCELLANEOUS ALLOWANCES (B. O. R's).

	Local Overseas Allowance (Not Taxable)		Indian Transitional Allowance (Taxable).			
	Single	Married	1-7-46 to 31-3-48	1 4-48 to 31-3-49	1-4-49 to 31-3-50	
Private	0/9d.	2/3d.	.,	••		
Corporal	0/9d.	2/3d.	0/6d.	0/4d.	0/2d.	
Serjeant	1/3d.	3/-	1/-	0/8d.	0/4d.	
Staff Serjeant	1/6d.	3/9d.	2/-	1/4d.	0/8d.	
W. O. II	1/6d.	3/9d.	2/6d.	1/8d.	0/10d.	
w. o. i	2/-	5/-	3/-	2/	1/-	

APPENDIX 'C' SHILLINGS PER DAY

MISCELLANEOUS ALLOWANCES (OFFICERS).

		Local Overseas Allow- ance (Not Taxable).		Indian Transitional Allowance (Taxable).		
	Single (or married but family NOT in India).	Married.	1-7-46 to 31-3-48	1.4.48 to 31.3.49	1-4-49 to 31-3-50	Only given to Single Non-Ac- commodate Officers.
Captain and below	5/~	12/6		••		11/
Major	5/-	12/6	12/6	8/9	5/	11/
LtColonel	7/6	18/9	17/6	12/3	7/-	14/-
Colonel	7/6	18/9	20/-	14/-	8/-	14/
Brigadier	8/9	20/	22/	15/9	9/-	17/-
Major-General	10/-	22/6	22/-	15/9	9/-	20/
LtGeneral and above	10/-	22/6	27/6	19/3	11/-	20/-

SPORT AT DELHI IN 1804

By "HYDERABAD"

LIEUTENANT-GENERAL Sir Walter Raleigh Gilbert, the writer of the following account, was one of the most distinguished leaders the Indian Army has ever had. Born in 1785, he entered the Bengal Infantry in 1801 and served till a couple of months before his death in 1853. He saw a great deal of fighting in Lake's campaigns, being present at the battles of Delhi and Laswari, and at the capture of Deig, and commanded a division with great success in both Sikh Wars. He is portrayed, in the act of receiving the surrender of the Sikh armies, on the reverse of the medal awarded to the Army of the Punjab in 1849.

He was an all-round sportsman, and well-known for his interest in the Turf. The autobiographical fragments which follow relate to a period just after Lake's successes in 1803, and were furnished by Gilbert to the writer of a memoir which appeared in "The East India Army Magazine and Military Review" in 1853, a few months before the General's death. They are given in his own words; a few footnotes have been added by myself.—Author.

THE first race I ever rode was in January or February 1804, against Solomon Boileau*. We were on the course at Beeana or Hindown, looking a a race which had just come off, when Boileau proposed a match as we then were, round the course. I won, but he had his revenge for, thinking that his horse had been beaten from being fat, he offered to run the race over again that day month, which I accepted. On the appointed day my animal was so much above himself that instead of starting at the word he reared, kicked, and played all manner of antics, till my antagonist had got so far ahead I could not make up the lost ground.

I won one race for Malcolm[†], that gave him the highest opinion of my skill and judgment as a "Jock." It was on a large northern horse, bought from Colonel James Skinner[‡], thence named "Secunder", against a very handsome colt belonging to and ridden by Norman Shairp^{\$}, who was most confident of winning "as he liked," as the turf phrase goes. Shairp's horse was known to possess extraordinary speed, but I doubted his capability of maintaining it. I therefore jumped off with "Secunder," making such severe running the whole way, that on entering the cords, I collared my opponent, and beat him on the post by a head.

Malcolm was in ecstacies, and henceforth my opinion on horse matters had great weight. Meeting him many years afterwards at the Coronation of William IV, in Westminster Abbey, he insisted on my going home to tiffin, for the purpose of showing me an Arab he had brought from Bombay, whence he had just returned. The present Earl of Enniskillen, then Lord Cole, and Sir Pulteney Malcolm were of the party. During the luncheon the brothers got into an argument and I thought I had never before heard two men talk so much and so fast, particularly

^{*}Lieut. Solomon Hugh Richard Boileau, 3rd Bengal Native Cavalry; died at Partabgarh in 1810.

[†]Sir John Malcolm, after being Arthur Wellesley's political officer in 1803, joined Lake in 1805 and made the treaty with Daulat Rao Scindia in that year.

[‡]Colonel James Skinner, C.B., founder of Skinner's Horse.

^{\$}A Bengal Army Officer who after serving in Lake's campaigns returned as a captain in 1815 and died in 1864.

Sir John. At length the Admiral, losing patience, said "D—n it, John, you won't give me time to speak." "Yes, I will," was the reply, and pulling out his watch, which he put on the table, he said, "I'll give you five minutes, and now let us hear what you can say in that time." This produced a merry laugh, and the conclusion of the argument.

Immediately after luncheon, the Arab was sent to the street door; and after looking him over, Malcolm begged I would mount and try his paces. After walking, trotting and cantering up and down the street, Sir John commenced to me in Hindustani: "Chullao, Gilbert sahib, chullao, khoob faistu! Wah! Wah! Gilbert buhadoor!" This brought such a crowd into the street, I was glad to dismount and make over the horse to the groom.

At one of the Headquarter parties during the race week at Delhi, a Mr. Fanthome,* formerly in the service of Scindia or Holkar, had been invited. The poor man was evidently unaccustomed to being in such a large party, and what made him the more uncomfortable was, he not being acquainted with, or I believe ever before having seen, a single individual of it; for after having sat down to table he continued looking from one face to the other with an inquiring eye. About the middle of dinner Malcolm, seeing his uncomfortable position, and wishing to make him feel more at ease, addressed him, "Pray, Mr. Fanthome, are you related to a gentleman of your name—that I saw about two years since at Poonah?" The delight of the man on hearing that one of his family was known was great. "Bless my soul," he exclaimed, "vat, you know Shack Fanthome?"

The very next horse that came to the toshu khanu was named "Shack Fanthome": remarkably well he turned out, and afterwards was in Norman Shairp's possession. Indeed, for a long time we were in the habit of calling Malcolm "Shack," though not in his hearing.

Added to great good humour and high spirits, Malcolm had a fund of amusing anecdotes, particularly of the Native princes. I remember his telling us one of the Nizam, who fancied himself as a poet. On meeting one morning early for hawking, the Nizam galloped up in great glee, exclaiming "Oh, Malcolm sahib, I have made such a beautiful couplet, all my people assure me Hafiz never wrote anything so good. Listen—

Kysa dourta toomhara ghora Bahoot nuheen, thora thora."

This reminds me of having heard Malcolm guilty of a pun equally ridiculous. John Monckton† happening to be leaving at a ball at either Edmondstone's‡ or Dowdeswell's \$ at the same time with Malcolm, the latter, a large powerful man, seized Monckton by the collar and hauling him into the midst of the party screamed in his particular falsetto voice, "Johnny Monckton, j and m and m and m which he repeated to his own great delight to all who came near, and to the delight of those who heard and saw what was going on. Monckton bore the jest with great good humour and patience.

^{*}Captain Bernard Fanthome, a French adventurer in the Jaipur and later in Scindia's service, joined Lake in 1803; and died at Bareilly in 1845, aged 74.

[†]There were numerous members of this family in India at the time, all descended from the 1st Viscount Galway. This was possibly John Edmondstone Monckton of the 2nd Madras Light Cavalry.

[‡]Neil Benjamin Edmondstone, Bengal Civil Service (1765—1841), later a Director of the East India Company.

^{\$}Probably George Dowdeswell, Bengal Civil Service (1765-1852).

I have already mentioned Lord Lake's shikaree Dulmeer Singh. Dulmahoy was the name he was generally known by. During our halt at Delhi, a valuable Arab called "Filbert", the property of Ned Hidge* of the 4th Cavalry, who had come from General Dowdeswell's † camp on a visit to Headquarters, was stolen. A large reward for its recovery was offered by Lord Lake, who was much annoyed at such a theft being perpetrated in his camp; but not the least intelligence could be got of the animal. Some days afterwards Dulmeer Singh, himself a Goojur of the Delhi district, was sent out to endeavour to trace the horse. At break of day the following morning but one, Dalmahoy to our surprise appeared on "Filbert," riding up the Headquarters street. He had stolen the horse from the thieves, letting himself at night down the chimney of the house in which the horse had been walled up, and removing the stones quietly, galloped off in the dark which he easily did knowing the roads.

When at Delhi I purchased my first Arab, "Sky Blue," a great event in those days when there were but few of that breed in Upper India. He was a remarkably fine, well-bred animal; and a few days after our arrival at Cawnpore I won a match with him against Jack Hunter's ‡ "Yankee", owners up—a mile for 25 Gold Mohurs, heavy odds on "Yankee", from his having won several races, and never before been beaten.

Few men have had more or finer horses than myself. One of the best and pleasant I ever possessed was a Caboolee, bought at Cawnpore for rupees 300 a day or two before the Grand Army took the field in 1803. He was about 14 hands, very strong, and as active as a cat, had evidently been a fruiterer, as there was not a hair on his back, the whole at one time must have been one large sore. Having but rupees 100 in purse, I was giving up all idea of purchasing, when John Greenstreet\$, the Adjutant, now Lieut-General, kindly urged my taking 200 from him to be repaid at my own convenience. It was a day or two ere I could prevail on myself to incur so heavy a debt, but at length I accepted the friendly loan. At that time the united debt of the whole regiment, two battalions, could not have amounted to rupees 10,000. About this period the Adjutancy and Quartermastership of the regiment became vacant, a comfortable snug berth in the olden times, and though powerful interest was made to get it for two other candidates, Lord Lake gave it to me, in consideration he was pleased to say of my services before Bhurtpore.

I lost no time in setting out to my new appointment at Benares, taking a fast rowing Beaulea.§ At Allahabad I landed, to pass a day with my friends Captain and Mrs. M. He was the Deputy Commissary of Ordnance in the Fort. There I found that gallant soldier "Commodore" Swinton, who had for two or three years been engaged to M.'s eldest daughter. We passed a pleasant day, and all was going smoothly when after tiffin the "Commodore" called me into an adjoining room and to my utter amazement said, "Gilbert, from what has occurred

^{*}This should be Ridge: Major Edward Jervoise Ridge, C.B., Bengal Cavalry, who retired in 1824.

[†]Lieutenant-General William Dowdeswell, H. M. Service, commanded a division under Lake, and was acting C.-in-C. in India in 1807.

[‡]Presumably Lieut.-Col. John Hunter, Bengal Infantry, who much distinguished himself at Bharatpur in 1825 and died at Banda in 1836.

^{\$}General John Greenstreet, Bengal Infantry, who died near Bristol in 1856 at the age of 74. He received no less than six bars to his Army of India medal in 1851, for Aligarh, battle of Delhi, Laswari, battle of Deig, capture of Deig, Bharatpur, and Nepal.

[§]A light passenger boat with a cabin.

Possibly Robert Swinton, Bengal Cavalry, who resigned as a major in 1809.

to-day, I am quite certain Miss M. likes you far better than she does me. Now, as I have her happiness at heart, if you will marry her, she shall still have the 20,000 rupees I purposed settling on her."

It was in vain I tried to convince the "Commodore" it was nothing more than gladness to see an old acquaintance, who was a constant visitor at her father's house before the campaign. Finding the idea so violent in his mind, I thought it best to shove off my boat at once. After all, Miss M. never became Mrs. Swinton, but married the son of a general officer of our service, and is the mother of a Baronet.

Early in February I received a pressing invitation from Colonel Lake to come and see them before their departure. I immediately started dawk to Calcutta, where farewell fetes and entertainments to the Commander-in-Chief were the order of the day. Soon after Lord Lake had sailed, a hog-hunting party was made to the plains of Kishnagur. In those days of pleasant memory the country thence to Moorshedabad, commonly called the Cossimbazar island, was one large preserve of the finest breed of hogs, and the country itself the most beautiful riding-ground that could be desired.

No doubt it would have continued to be the best hunting country in the whole world, but that about the year 1810 dangars or boonneeahs* began to be employed at the indigo factories in place of the Mussulman coolies, before engaged. These dangars, not being troubled with caste, and fond of shikar and good living, when not actually at work, were out with dogs and spears, killing sows and little pigs. This, with the usual hunting parties from Calcutta, in the course of a few years drove the hogs from the Kishnagur plains to the banks of the Ganges.

Our party consisted of Arthur Cole, † Norman Shairp, Heary Mundy,‡ George Warde\$, F. Fauquire\$ and myself: our tents were pitched at Nowbourga, and some idea may be formed of the abundance of game from the fact of our killing the first day, morning and evening, thirty-six boars. To our second day's bag we added a fine tiger, that took us some hours to dispatch, the elephants being bad: he had been seen by the Mahouts peeping over the jungle at us as we rode the pigs in his neighbourhood. At his first charge, he sprang clean on the head of the elephant on which Shairp and Mundy were, killing the Mahout with a single blow, when the elephant ran away and soon shook off both the sportsmen and the servant in the kuwas.

Having to muster at Secrole, I could only remain for four days' hunting. The party returned to Kishnagur on the 5th April, after having killed two hundred and sixty good boars.

^{*}Orans and other tribes from Chota Nagpur who go to other parts for employment as labourers,

[†]A Civilian.

[‡]Aide-de-camp to Lord Lake, and author of Pen and Pencil Sketches, 1832.

^{\$}Bengal Civil Service, retired 1830.

Should be Francis Fanquier, Bengal Civil Service.

LESSONS OF WARS THROUGH THE AGES

By Major D. H. Donovan, M.C.

BISMARCK said: "The war of 1870 will be child's play compared with that of to-morrow". Transfer this statement to our future. We have emerged victorious from the most devastating war the world has seen, and if we look more deeply into this last struggle we shall see that Bismarck's statement is indeed true of our "to-morrow."

Up to to-day the law of the jungle has prevailed. Might has been right. As long as Nation looks upon Nation with suspicion, force will be the hallmark of success. War, then, is not only a possibility, but a probability; when, we cannot tell. But it is thus the duty of all soldiers to study the art of war, for in studying the past they will automatically look to the future. Many may say that the object will be achieved without reflection and meditation, but in fact that is not true. I defy anyone to name any great General who has mastered his profession without those two aids. Even the great Napoleon Bonaparte once said: "It is not some familiar spirit which suddenly and secretly discloses to me what I have to say or do in a case unexpected by others; it is reflection, meditation."

Political opinions are gradually swinging towards peace in the future, and to fear of another war owing to the discovery of the "atom". Their influence will blind the nation to the possibility of war. How much will that influence affect the Army and its military studies? We all know the Army has been closely linked with the Budget. To stop money for the Army is to cut off its life blood and thus halt advancement in every sphere of the military profession. If, then, our ideas and learning cannot be put into practice, how can our soldiers and leaders of to-morrow be anything but mentally and professionally constipated? To study the future we must study the past, and I propose to trace the effects of the aftermaths of all our great Wars from Marlborough's time to 1939, and to prove how history in every case repeated itself as regularly as the clock hand circles every hour.

In 1697 England signed the Peace of Ryswick with Louis XIV; it was nothing more than a truce to give each side time to regroup and refit, so as to renew the struggle later. France availed itself of the valuable opportunity; England followed up the affair with wholesale reductions, the result of which put Marlborough in dire straits at the outbreak of the Spanish succession war. Not till it was nearly too late did Parliament vote large "augmentations" on behalf of the Army; new regiments had to be raised and trained; methods of warfare taught to new soldiers. Why could not all this have been done in the interim period of 1697 to 1702, during which time a formidable Army could have been raised? A highly organised and well equipped British Army at that time might have averted that long and tedious war.

Added to the difficulties of those days was the cosmopolitan nature of the British Army, whose Generals relied to a vast extent on the whims and promises of European potentates whose troops they hired. Thus we see Marlborough, our greatest General, handicapped and thwarted by the politicians of his day; striving to reorganise and train in order to form an Army worthy of his command, but frustrated by men who lacked foresight for war to the favour of peace and commerce.

Marlborough's wars lasted from 1702 to 1714. He taught not only England but Europe a new method in the application of war—that the comfortand administration of his force was as important as the battle itself. His greatest teaching was mobility and speed of manoeuvre, thereby causing surprise concentration of force at the vital point. Those were the foremost lessons learned from the war of the Spanish succession. They should have been invaluable for a future war.

England needed peace after the peace of Utrecht in 1713, and Walpole gave it to her; under his guidance she grew rich and prosperous; but the Army failed to keep pace with the times, and instead of thinking and training for the future, the Services slid to a standstill, and only studied the art of dress and fancy uniforms. The science of war was discouraged for fear it might come about.

This state of affairs continued till the Seven Years war from 1756 to 1763, when William Pitt tried to relight the glories of the past. To a certain extent he did reorganise the Army, and in fact was the first to attempt conscription in England. But the Army was stagnant; its leaders docile and inert. They had forgotten Marlborough's lessons and cared less. It was left for William Pitt to pull the nation through those hard and difficult years, and guide the Army and its leaders along a path they should have seen for themselves.

Wolfe, victor of Quebec, was about the sole inventor of a new form of tactics; he taught the use of two ranks and a higher speed of fire from the muskets. By the use of two ranks he taught one of the greatest principles of war—freedom of action. But it was forgotten and did not reappear until it was taught by Sir John Moore. Wolfe did indeed teach all the lessons of fire control, formations and equipment for battle that his successor Moore taught at Shorncliffe Camp before the Peninsular War.

Thus once again, from 1763 to 1808, methods of warfare retreated rather than advanced—probably because of the country's fear of the future. Lessons taught by Wolfe and Pitt the Elder were forgotten and were not remembered again till the rude awakening of the Napoleonic wars, in which England struggled for her very existence. In 1784 England was once more at war with revolutionary France; it lasted until 1802, during which time British leaders persisted in the policy now known as "penny packets." They had forgotten Marlborough's lessons of preponderance of force at the decisive point, and both British and French armies were led by uninspired leaders.

Let us jump to 1802 and study men such as Moore, Wellington, the Duke of York and Napoleon. The Duke of York set about reforming the Army, giving to it an organisation and hope for the future which set its morale far higher than any previous level. Nevertheless, when Napoleon threatened England, she was sadly unprepared. It was left to Castlereagh, Secretary for War, to hold the reins; he it was who provided the country not only with an adequate striking force, but also with the means of keeping it in the field. The spirit of the country was raised, but adequate weapons for her defence were not available. In short, the struggle between Napoleon and Wellington lasted from 1808 to 1815—a period which saw the tactics of the thin red line against the French massed formations.

England had far fewer troops than her opponent, and it was probably because of this that the Duke of Wellington's great teaching was economy of force; he did, however, teach the Army the need to fight from reverse slopes—a teaching which has held to the present day. But perhaps his greatest teaching of all was that of his epic battle of Salamanca in 1812, when he showed how, by rapidly switching from the defensive to the offensive, victory could be gained.

What of Wellington's adversary, Napoleon? Here was a great soldier steeped in politics—with the governing and ruling of a nation as well as the direction of her armies. His only great teaching to the world in the arts of war was in the use of artillery; for his mass formation tactics, though successful against his European opponents, proved useless against the British. But Napoleon was a master in the art of war, and taught the world the great advantage to be gained out of massed gun fire. He was, in fact, expounding the teaching put forth by Marlborough, Conde, and Turenne.

Three lessons, then, emerged from the Napoleonic struggle: fire power, speed of manoeuvre, and success of massed artillery. The British Army was now the most toasted and powerful in Europe. The fame of her General, the Iron Duke, was established; but she needed to be reorganised in the light of those three lessons, and it was for the Duke to give the word. But he did not. England became wrapt in politics; she longed for peace and plenty; the Army sank again into its historical oblivion.

Once more, then, the huge forces with which England had been saved went into the background. Its leaders wasted their time; the Army was to a great extent disbanded, and what remained sank into the abyss of stagnation, in which state it found itself on the declaration of war with Holy Russia in 1854.

The Crimean War was a disgrace to our Nation, to our Generals. Castlereagh's re-organisation had been cast to the four winds; the Army fought without a policy, without reserves. It was in desperate plight in the winter of 1854, and the conscience of the nation was roused; reinforcements and medical aid were despatched hurriedly, but it cannot be denied that the Crimean War did more than much to lower the hard-earned prestige of the British Army. That prestige was not regained until it was fought for on the bloody fields of Flanders half a century hence.

There were, however, a few lessons learnt during the struggle for Sevastopol. The Russian force far exceeded our Army in numbers, but the excellence of the new British Minie rifle made up for our lack of numbers, thus conclusively proving the importance of fire power and the denial of ground by fire. It was probably from the Crimean War that we could trace the great striving by every European Power for quick-firing weapons controlled by the minimum number of men. The next lesson the Crimean War taught was the need for medical assistance in war—the fact that the sooner a casualty was returned to the front line the easier would it be for an Army to maintain its numbers in the field. And lastly, the War taught the advantage to be gained from a unified control of operations, and the benefits to be derived from a more serious study of the military art.

Some advances were made in the Army from this period to the Boer War, but very few considering that the Prussians had soundly defeated the French in 1870 at Metz. The French, masters of national warfare, had been defeated by a hitherto mercenary nation. Here was a signal warning to England, but it was given in vain. Isolation was the order of the day. England's leaders failed to grasp how seriously the balance of power in Europe had been affected, and how difficult would be our policy in our Colonial Empire with a Europe which looked upon our Army as a second-class force. Had our Generals studied the Franco-Prussian war we would have had the best Army in Europe. But again nation and Generals feared war, and refused to study war, and so we come to 1914 and the outbreak of World War No. 1.

That War showed little in the art of war to the military student. It was the only static war the world has ever seen—a freak war in the history of the art, and a war which, in all probability, will never be repeated. For the purpose of this article we may refer to it but little, with no very great loss. It was essentially a scientist's war, when very formidable weapons came into being—the machinegun, the tank, the aeroplane. Throughout the war in Flanders we saw the armies struggling for power in the manoeuvring of its forces and for command in its fire power. Little or no attention was paid to the British invention of the tank in modern war or even as a formidable weapon in support of Infantry. The aeroplane was more a Galahad of the air than a serious weapon in attack or defence.

Had Generals been more astute they would have seen greater possibilities in these weapons—but Armies had become imbued with the idea of static trench warfare, and not until towards the end did we see the success to be achieved from mobility and manoeuvre. Winston Churchill was perhaps one of the few men in the Great War who realised the necessity for surprising the enemy by manoeuvre when he sent an expeditionary force to Gallipoli; had it succeeded it would have been a very great feat of strategy. And had Allenby commanded on the Western Front the history of those years might have been different, for he was a student of the future school of thought—a man with a fertile mind and breadth of conception.

Let us, then, study, the lessons of those years of war. Mobility and manoeuvre are once again on the front page, for he who wins the war of manoeuvre wins the day. To assist both those lessons we saw the greater use of the motor car and the invention of the tank and the greater use of the machine gun. Here was food for thought, and, looked at in retrospect, it appears obvious that the Army needed organising by virtue of these very lessons. It is remarkable that the terrific potentiality of those lessons was not fully appreciated.

History repeated itself. The nation was tired and so were its leaders, who insisted on disbandment of the Forces to the minimum; it left nothing more than a meagre police force, with a depleted cadre of regular officers, and they were not encouraged to think on the lines of war, but simply and solely to do as they were told. Money was short, and consequently weapons and ammunition were scarce; scientists were not greatly encouraged to invent or produce new weapons or ideas in the military field. The idea of becoming a soldier was ridiculed, and it was a standing joke that "only the fools of a family went into H.M. Forces."

That was the mood of the country between 1918 and 1939, during which Germany prepared for Blitzkrieg warfare. Hitler's leaders were far-seeing; they studied the lessons of the past, and evolved new methods of war for the future. Why should England, a country renowned for its skill at arms, not have been able to anticipate the future and train on those lines? In 1939 she found herself untrained, lacking equipment and weapons. It was an act of God that she survived the war's earliest stages, and it is probably the last occasion on which its traditionally hazy policy will escape its just deserts. Let us assume, then, that that is a policy of the past, and that in future we may more seriously study the future war. Let us study the methods of war evolved during 1939-45.

Unlike World War I, we have seen terrific speed of manoeuvre added to a colossal fire power; we have seen the dexterous use of airborne and parachute troops brought into action by gliders and troop-carrying aeroplanes; we have seen the use of more and more automatic weapons. We have seen battles rolling on to battles at hitherto unbelievable speeds, as witness the famous Eighth

Army's advance, withdrawal and renewed advance across 2,000 miles of arid desert. Then there is the lesson of the self-propelled rocket-firing aeroplane being used for shock tactics in breaking the opponents' defence—a weapon still in its infancy. There was General Slim's use of the air when he transferred a division from one part of the front to the other in Burma. Field Marshal Montgomery taught the world the devastating effect of massed artillery firing on given points—a lesson the Germans had failed to learn even from the last war. How, then, are we to apply these lessons in the war of "to-morrow"?

Methods of to-day will not be those of the future—or, rather, they should not be so. "War", said von Moltke, "teaches war". Therefore, to those of us who have learnt their war by this war, it is obvious that the next struggle will be one of even higher speed, manoeuvre and fire power than that of to-day. It will be a contest of explosion and energy that will make military leaders and scientists of to-day gasp with unbelief. How can we re-organise our Army and train for this phenomenon?

Take first the Infantry soldier. He is equipped with a bolt-loading rifle, capable of firing only twenty well-aimed rounds in a minute at the maximum. Here is one tip from the late war—arm him with an automatic rifle which is 2 lbs. lighter than his present one. Let it fire a .275 bullet, thus lightening the weight of his ammunition. What are the drawbacks? I see none. The infantry soldier even in the future war must be the focal point of the Army. Why not, then, look to his weapons and arm him in accordance with the times?

That brings us to mobility—for our Army must be doubly mobile to what it is to-day. To aid us over this point we must call in the scientist, and ask him to build for us a vehicle capable of travelling in the air as easily as it does along the ground. Such a vehicle would open up vast fields in the art of war; it would change its very characteristics, for then the enemy would have a rear as vulnerable as his front. We would, in fact, then be able to besiege our opponents on the battlefield—hitherto an exceedingly difficult task. The real air war will have begun.

Artillery, too, must change its ideas. We have seen how a small number of self-propelled guns were used with great effect; how quickly they could be brought in and out of action. The advantages of a self-propelled gun are enormous, and to any thinking man they will most definitely supersede the old methods of the gun being dragged behind some kind of powerful vehicle. Besides all this, in our real air war a self-propelled gun would be transported far more easily than one which is attached.

How can Radar be turned to advantage by the Army in general? I am not a scientist and know little about radar, but I do suggest that if it was used by every company to locate enemy positions and enemy patrols needless casualties would be avoided. This, however, is a matter for the scientists, but it is not beyond the bounds of possibility that we may live to see this use of radar adopted and accepted, as is the mine detector, for infantry to-day.

Air power in the next war will be even more important than it is to-day. Jet propelled aeroplanes will step up the speed of aerial warfare—and the Army will have to follow suit. In the field of armour, how can we profit from our present-day experience? We have seen the vital need for heavy guns with an effective range, but not so heavy that the tank becomes a propelled gun; the

use of the tank, I feel, reached its zenith during the late war, but its brother-inarms, the flame thrower, has far reaching possibilities, and should invariably be used in a counter-attack role before the Infantry has managed to bring up its anti-tank weapons.

The atom bomb has arrived—but it will not stop war. Scientists will undoubtedly evolve a counter which will render this new explosive harmless, whether it be by cosmic-rays or by radar controlled atom bomb exploded by wireless rays on reaching the approaching bomb of the enemy. But whatever method is employed, the atom bomb is not such a great weapon as it is made out to be. It has cost enormous sums of money, and is the result of the work of hundreds and thousands of men and women, working intensively for five years. Until some cheaper method and some commoner substance than uranium is discovered it will be more a dream for war than a reality. The discovery of the atom bomb has, I fear, made some people complacent, in that they say war is now a thing of the past.

This article has shown how history repeats itself. We must break this inevitable rule. We must break away from the accepted theory that the Army is ruled by the Budget. Let the Army rule the Budget rather than be ruled by it—and then we shall have the equipment of our desire and thereby ensure world peace. Expenditure on scientific research for the Army must be augmented. The profession of arms must be popularised to boys at school; and the nation must be encouraged to look upon its soldiers with pride, rather than think of them as an unnecessary burden.

Drastic changes in policy and ideas are needed to keep pace with the times. We must strain towards the answer for the future as a means of insurance for keeping the fruits of the labours we have won at such great cost.

Short-Term Commissions in the Royal Indian Navy

A scheme of Short-Term Commissions in all branches of the Royal Indian Navy has been introduced for officers of the R. I. N. R. and R. I. N.V.R. who are either British subjects of Indian domicile or descent, or subjects of Indian States. Officers released from the Service since 8th, May 1945, are also eligible.

Applicants must have rendered at least one year's service in the Reserves and be of the rank of Sub.-Lt. or above. Commissions may be either for five years or for three years followed, in either case, by three years on the Emergency List. Both types of commission may be extended at officers' request beyond the originally prescribed periods, at Government discretion. Candidates must be between 20 and 35 years of age for a five-year commission, and between 20 and 42 for a three-year commission. They must be medically fit.

Applications of serving Reserve Officers are to be submitted through the normal service channels, but those of officers already released should be sent direct to Naval Headquarters. Officers must state whether they are prepared to accept an alternative type of commission, if the type for which they apply cannot be offered to them. Suitably qualified Special Branch officers may be considered for commissions in Branches appropriate to their qualifications.

SOUTHERN RHODESIA WANTS IMMIGRANTS

By W. D. GALE.*

SOUTHERN RHODESIA is the youngest self-governing country in the British family of nations. Fifty-six years ago she was trackless veld, inhabited by wild animals and even wilder black men who lived in the darkest savagery, superstition and ignorance. In these fifty-six years a comparative handful of Europeans, mainly of British stock, have brought law and order, internal peace and co-operation, a sound economic system, flourishing farms and mines, well-organised modern towns and other concomitants of civilisation. Now she stands on the threshold of still greater expansion and she needs a greater, much greater, European population to give effect to her plans.

Southern Rhodesia has one of the finest climates in the world. Since most of the country lies on a plateau of between 4,000 and 5,000 ft., it is more temperate than tropical, and parts of the country below 3,000 ft., are sub-tropical. The mean annual temperature of the central plateau is 66 deg. F, with a mean annual maximum of 78 deg. The Rhodesian year is divided roughly into two seasons, the Rainy Season (October to April), which is the summer, and the Dry Season (May to August) which is the winter. The "autumn" is the month of May, when the rains have ceased and the air is crisp with the approach of winter; the "Spring" is the month of September, when the cold snaps of winter are over and the air is langourous with the approach of summer.

Although concentrated into only seven months of the year, the rainfall over most of the country is adequate, and in some areas more than adequate. In the mountainous districts of the Eastern border it is between 40 and 56 inches, in the north-east (Mashonaland) it ranges between 25 and 40 inches, in the southwest (Matabeleland) between 14 and 25 inches. When it rains, it rains in earnest.

Accordingly, agricultural activities are pretty sharply defined between the different areas. Matabeleland, with its lower rainfall and consequently sweeter grazing, is the cattle country; Mashonaland, with its average of 30 inches, has tobacco and maize for its principal crops; the Eastern District is the place for forests, fruit and wheat.

Constitutionally, Southern Rhodesia ranks as a self-governing Colony, but she deals with the British Government through the Dominions and not the Colonial Office. She enjoys full control over her own affairs with the exception of legislation affecting the Native population and the affairs of the Rhodesia Railways, Ltd., a private company, which has to receive the sanction of the British Government. She is rapidly nearing Dominion status.

Politics are on party lines, and the Government is carried out by a Cabinet consisting of a Prime Minister and five Ministers, who are responsible to a Parliament of 30 Members. The King is represented by a Governor who, with the Cabinet, forms the Governor-in-Council, the supreme authority. The Civil Service is a permanent one, on the British model. The legal system is soundly organised on the basis of Roman-Dutch law (similar to the Union of South

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Africa), with a Court of Appeal with jurisdiction in both Southern and Northern Rhodesia, a High Court consisting of a Chief Justice and three judges, and the magisterial division of the Department of Justice which presides over the lower courts,



The capital and chief administrative centre is Salisbury, in Mashonal and, a charming town of flowering trees and a grand climate. The chief industrial and commercial centre is Bulawayo. Both these are cities. The chief municipalities are Umtali, Gwelo, Gatooma and Que Que, other local government centres being administered by town and village management boards.

Economically the main basis of the country's prosperity is gold mining, the principal gold mines being scattered throughout the country and not concentrated in any one area as in South Africa. Important base minerals are asbestos, chrome and coal, and in asbestos and chrome the Colony is one of the most important producers in the Empire. Its coalfields at Wankie, 60 miles from the famous Victoria Falls, are over 400 square miles in extent and contain enough coal to meet the present world consumption for 2,000 years! Agriculturally, the main products are tobacco (flue-cured Virginia) which is second only

to gold in the value of its annual production, maize and cattle (meat, hides, etc.). Hitherto, secondary industries have played a relatively minor part in the Colony's economy, but now the country is set for considerable industrial expansion.

The Government's policy is to encourage private enterprise to establish new industries and expand existing ones, but where private capital hesitates to take the risk and the Government is satisfied that a particular basic industry is necessary to the Colony's well-being, it will establish the industry as a State concern, run by a statutory commission. This principle has already been applied to iron and steel. The State Iron and Steel Works are being erected at Que Que to exploit the large deposits of iron ore and lime in that area; these will provide the basic material for privately-owned secondary industries. Another example is cotton. The State Cotton Spinning Mills at Gatooma purchase the cotton from the farmer at guaranteed prices, spin it and sell at cost to privately-owned textile weaving factories at Bulawayo and Gatooma. Private enterprise is expected to establish many more industries.

All this expansion means more population. The present population consists of about 80,500 Europeans, 1,607,000 Natives, and 7,000 Asiatics, mainly British Indian. The Europeans are therefore outnumbered 20 to 1. A large proportion of the European population is concentrated in Salisbury (22,000) and Bulawayo (18,000). Most of the Natives live in the Native Reserves, in which Europeans are not permitted to live unless their presence benefits the native inhabitants. The Native Reserves and Native Purchase areas occupy 29,000,000 of the Colony's total of 96,000,000 acres.

The Government's policy is to welcome skilled immigrants of British stock who can assist in the development of the country, who either have employment to come to or sufficient means to maintain themselves while seeking employment. Most skilled artisans can be assured of employment, but there is little scope at the moment for purely clerical workers, although the demand for these should increase as the various development schemes get going. But at the moment all normal demands for clerical people can be filled from within the country. Persons with sufficient private means to make a job unnecessary can enter at any time, provided, of course, they conform with the normal immigration regulations on character and health.

Most Indian Army officers who have applied to us for information about Rhodesian conditions have expressed a desire to farm or to run small holdings with a view to augmenting their income. A word or two of advice on both these ambitions might not come amiss.

After the First World War, hundreds of Army pensioners poured into the Colony to take up land. They found the land all right, but most of them did not know how to use it. During the tobacco and cotton boom of 1926-27 they could not help making money, but when the slump came many of them went to the wall and left the country with a curse. The Depression of 1931-33 completed the weeding out process. Those that were left, having some natural aptitude for farming, learnt the ropes the hard way and are to-day established and successful. But they were the minority. We don't want that to happen again.

Farming in Southern Rhodesia is not just a matter of leaving everything to the native in the hope that the crops will grow while the farmer does the social

round. On the contrary, the successful farmer must work and he must know his job. He must know something of Rhodesian conditions, how to safeguard his crops against pests, how to handle native labour. The best way to acquire this knowledge is to spend a couple of seasons as an assistant with a reliable farmer to learn the ropes before launching out on one's own. The Department of Agriculture is always prepared to advise on points like this. No one should think of farming with less than £2-£3,000 capital as the absolute minimum.

A complication which exists to-day, but from which earlier settlers were free, is shortage of native farm labour. With the development of proper agriculture in the Native Reserves fewer natives are now seeking employment, and mining and industry are serious competitors with farming for the native labour that is available. A large number of native farm workers come from the neighbouring territories, but these territories have become alarmed at the breaking up of family and village life owing to the absence of the males, and are restricting the flow. They also need more native labour for their own development schemes. So the average farmer has fewer natives than he needs, and he has to make the best possible use of his available labour. Good working conditions are essential, decent housing, good wages, reasonable hours, fair handling. Increased mechanisation of farming operations wherever this is possible will help to overcome the shortage of human hands.

At present all Crown land farms are being reserved for Rhodesian ex-Servicemen under the Land Settlement Scheme, but it is likely that Crown land will become available for non-Rhodesian ex-Service settlers later this year. The price of Crown land varies from about 4/- to 15/- per acre, according to situation and quality. The Land Settlement Act of 1944 provides for a scheme to settle "civil" (as distinct from Rhodesian ex-Service) settlers on Crown land farms, provided they are (a) at least 21 years of age; (b) of good character and legally competent to hold land; (c) intend to occupy the land personally and develop and work it exclusively for their own benefit; (d) are qualified to use the land beneficially; and (e) possess sufficient capital to ensure the beneficial occupation of the land in accordance with the principles of good husbandry. The "principles of good husbandry" mean preserving the fertility of the soil and avoiding soil erosion by the adoption of sound farming methods.

There is also the Contributory Purchase scheme under which the settler may contribute one-fifth of the purchase price, provided the price of the land and improvements does not exceed £3,000. If approved by the Land Settlement Board (who administer all schemes under the Act), the settler takes the farm on lease, the minimum period of lease being 12 years before he can receive title. Both these schemes, however, have not yet come into operation owing to the requirements of the Rhodesian ex-Servicemen's scheme.

So much for farming. Now for the smallholding. Most people ask for "anything from 40 to 200 acres on which I can grow flowers, vegetables, fruit, poultry, etc., near a large centre to give me a market to augment my income." Well, that is rather a tall order. Smallholdings of this size anywhere near the towns are usually expensive and they are not at all easy to get. This kind of land is handled by the private estate and land agent. But there is another factor. In growing flowers, etc., for the local market the European smallholder has to contend with severe competition from the Asiatic and native market gardener, who can live on far lower prices than he could accept. But if the income is not of primary importance, working a smallholding can be a fine way of life.

The retired man who does not need to work will probably find Southern Rhodesia to his liking. Among the mountains and valleys of Umtali, Inyanga and Melsetter and on the highveld at Marandellas, a village 40 miles from Salisbury, he should be able to find something to suit him. Marandellas has several ex-Army settlers and the district is noted for its social life. On a pension of £400-£500 a year a man and his wife could live in reasonable comfort.

The cost of living is on the high side as compared with Britain, but this is offset by the much lower income-tax and the cheapness of native servants. Income-tax on incomes earned in the Colony is at the rate (for married persons) of 1/6 in the £ after an initial abatement of £500 and an allowance for each minor child of £100. Native servants, who are reasonably efficient if handled properly, are usually paid about £2 a month for houseboys (slightly more for cookboys) and £1—£1-10s. for garden boys, plus rations (mealie meal, meat and vegetables) and quarters.

The shortage of housing and hotel accommodation, as a result of war conditions, is a brake on immigration at the moment, but it is expected that this position will be eased by the end of the year. If anyone is contemplating coming to this country, it would be advisable for him to defer his arrival for at least another three or four months. And then book hotel accommodation well ahead.

Would-be immigrants are strongly advised to visit this country on a temporary basis in the first instance, if this is possible. In other words, don't burn your boats until you have had a chance to have a good look round and to decide whether you really would like to live in Southern Rhodesia. To the Rhodesian, there is no country in the world like Southern Rhodesia, but the newcomer, seeing things with fresh eyes, may not altogether like what he sees, and it would be a pity if he found himself anchored here. We want new settlers, yes, but we want them to be happy settlers.

If any if your readers are returning to the United Kingdom for demobilisation and are thinking of coming to Rhodesia from there, they should contact the office of the High Commissioner for Southern Rhodesia, Rhodesia House, 429, Strand, London, W.C.2, where they will receive all advice and assistance. If they wish to come to this Colony direct from India they may care to write for more detailed information to the Director, Public Relations Dept., P.O. Box 1150, Salisbury. We shall be happy to help them all we can.

Let me conclude with a quotation from a pamphlet written by Major (now Major-General) W. J. Cawthorn, 4th (Bhopal) 16th Punjab Regt., who visited Southern Rhodesia in 1935 to assess its suitability for retired Indian Army officers. After an exhaustive analysis he wrote in conclusion:

"In my opinion Southern Rhodesia is relatively a very suitable country for permanent settlement by officers of the Indian Army..... I would strongly advise any officer of limited means who does not wish to settle in England to visit Southern Rhodesia and see conditions for himself before deciding to settle elsewhere. If he is unable to afford a preliminary visit andthinks that conditions would suit himself and his wife, I would hazard the opinion that he would not be taking an undue risk in coming to this country with a view to permanent settlement..."

AIR DEFENCE AND ITS LESSONS*

BY AIR MARSHAL SIR RODERIC HILL, K.C.B., M.C., A.F.C.

FREQUENTLY meditate on what an inconvenient invention flying has so far proved. The conquest of the air came at a time when war clouds were gathering, and it was not long before this nascent art was harnessed to the war machine. As a result, nine out of every ten aircraft built so far have been used for war purposes. From the military point of view, the advent of flying was probably the biggest single innovation since the first use of gunpowder six hundred years before. It came as a severe jolt to the complacency of contemporary thought.

During World War I, whatever forebodings haunted the higher Naval and General Staffs, and in spite of unwelcome attentions of the German naval airships under cover of darkness, the people of Britain slumbered on. But one fine June day in 1917, the morning of June 13, they were awakened with a shock which sharply marked the end of an era.

The citizens of London became aware of a resonant droning in the high summer haze; some wondered vaguely why our machines were so active. A few minutes later the crash of bombs was heard—small bombs, but 162 men, women and children crowding the streets with innocent curiosity were killed. The bombs from fourteen Gothas caused more casualties in this raid than all those inflicted on London by the Zeppelin attacks up to that time.

Lieut. General (now Field Marshal) Smuts, then a recently appointed member of the War Cabinet, saw the Gothas, and when the raid was over visited the areas where the bombs fell. He was deeply concerned not so much by the sights as by what his imagination conjured up. He saw the writing on the walls of London. That afternoon the Cabinet met. A fortnight later, on July 2, a proposal to double the size of the air service was approved. Meanwhile, events moved fast.

On Saturday, July 7, a second raid on London took place, killing 54 and injuring 190. This, however, was not the most serious aspect of the case. The main cause for alarm was the futility of our unorganised defence. Although 78 of our aircraft took off to repel the raid, only one Gotha was shot down, and the fire of our anti-aircraft guns failed to break up the enemy formation. The country was indignant and mortified. These raids were the means of bringing home to our people that, for the time being, the enemy possessed offensive weapons to which we had no effective counter.

On July 11 the Cabinet set up a Committee, with the Prime Minister as chairman, to report on home defence arrangement in particular, and on air organisation and the direction of air operations in general. The Prime Minister had no time to lend more than his name, and the main responsibility fell on Smuts. He lost no time. He submitted two reports. As far as the Air Force is concerned, the second report is an historic document. It foretold the inception of a unified air service, and contained the following words:

^{*}Condensed from a lecture given before the Royal United Service Institution, London. Air Marshal Sir Roderic Hill commanded a Fighter Group, Air Defence of Great Britain, and Fighter Command between 1943 and 1945. He is now Air Member for Training.

"But careful staff work is here, in the terra incognita of the air, even more essential than in military and navel operations, which follow a routine consecrated by the experience of centuries of warfare."

He saw that air operations as a whole, and air defence as part of them, required unified direction and a thinking machine behind it which could sift the wheat from the chaff. I have recalled the two raids of June 13 and July 7 and their effect because, though small in themselves, they formed the first essential piece of background to our story of air defence.

As a result the Air Staff was set up. Though many eminent minds contributed to the sharp exhilaration of this renaissance in the military art, four names are pre-eminent: Smuts, Winston Churchill, Sir David Henderson and Lord Trenchard. Between 1918 and 1939 the effects of this new venture became visible until, on the outbreak of a second war, they were fully apparent. As a whole, and as always, we were unready, but in so far as we had made preparations, air defence was well ahead.

Up till 1934 the problem of air defence, with the decreasing margin of speed between fighters and bombers, had seemed well nigh insoluble. The turning point may be said to have been reached in March, 1935, when the first Treasury grant was obtained for Radar. Two other major components of the defence were later: the 8-gun high performance fighter, and the Group and Sector organisation in Fighter Command. As the shadow of war approached, Lord Dowding worked feverishly to perfect a system of air defence proof against the great events and trials to some.

When the organisation of our active defence system was fully developed towards the end of the war, the whole country was divided up into twenty Fighter Sectors controlled by five Fighter Groups under Fighter Command headquarters. The Air Officer Commanding-in-Chief, Fighter Command, was in operational control of all arms—fighter squadrons, guns, searchlights, balloons, countermeasures and decoys of various kinds. The guns and searchlights themselves were under the command of the G.O.C.-in-C., Anti-Aircraft Command, and were administered by the War Office.

Ultimately the control of all weapons was based on two delicate and complex organisations: the raid reporting system and the communications system. In 1944 we had about 250 Radar Reporting Stations round the coasts, with some inland, to track enemy aircraft coming in over the sea, and a network of over 1,400 Royal Observer Corps Posts to plot aircraft flying over land. We had also a vast nexus of communications, radio telephone and land line; 2,000 private telephone lines, 60,000 miles of wire, 470 teleprinters, with 16,000 signals personnel and 150 highly trained G.P.O. engineers. These were necessary because instant control had to be exercised over between 600 and 1,000 aircraft, 3,000 guns, 3,000 to 4,000 searchlights, and 2,000 balloons. The nerve ganglia of the system were the Operations Rooms at H.Q. of Fighter Command, Fighter Groups, and Fighter Sectors.

The complexity of this organisation was dictated by the time factor. At 200 m.p.h. it only took enemy bombers 15 minutes, (at 300 m.p.h. only 10 minutes,) to reach London from the coast. Time being the essence of the problem, every commander at Groups and Sectors, according to his sphere of responsibility, had to have enough information to produce a physical display in his Operations Room so that he could issue his orders to aircraft, guns, searchlights and other weapons in time. The unique vulnerability of some of our vital targets, especially London,

in relation to the far-flung crescent of German bases ringing us round, forced us to go on developing this intricate and highly responsive mechanism. At its zenith in 1944, it reached a remarkable pitch of scientific and military ingenuity.

The Battle of Britain period has been so well written up that there is no need for me to dwell very long on it. There are just two salient features—the time factor and the Group and Sector organisation—which are worth enlarging on a little.

The Time Factor. In those days pilots at what was called Readiness had to be airborne within five minutes. Often they did it in less, and got it down to two minutes. Thus the time taken from the first hint of the presence of enemy aircraft until the pilots were airborne to intercept was about six minutes: two and a half minutes from radar tube to Operations Room table; one and a half minutes from Group Controller to the pilots at dispersal point receiving their orders on the loud speakers; two minutes to airborne time.

The Group and Sector Organisation. Normally Fighter Command held a watching brief and did not interfere in day-to-day operations except on questions like inter-group reinforcement. The Group Commanders set the battle and ordered off the appropriate squadrons, using the Sector organisation to give effect to their orders. The Sector Commander then took over and arranged the actual interceptions, when the affair was taken on by the formation leaders in the air. Responsibilities at the various levels were carefully balanced to ensure the maximum flexibility and the efficient concentration of striking power where it was most needed.

Without this system we could never have won the Battle of Britain; without radar ten times the defending force could not have achieved the same results. On 15 September, 1940, 21 squadrons were airborne, and the panels in No. 11 Group Operations Room showed that 21 squadrons had engaged the enemy, with results not unsatisfactory to us. That day the enemy took a knock from which he never wholly recovered. That day, too, was the apocalypse of Lord Dowding's life-work.

Let us skip three years. The march of science has given not only us but the enemy new and more deadly equipment. They have improved radio navigation aid, they have fast and better armed and armoured bombers. We have developed night fighters carrying airborne radar (A.I) and ground controlled interception radar stations (G.C.I) wherein both friend and foe can be seen together by the Controller on the Cathode Ray Tube, and interceptions effected in the dark or bad weather. Radio telephony, which serves to connect Controller and air crew, has made great strides, and the V.H.F. system gives more channels of communication, greater range, and clearer speech.

The technique of night interception needed on the one hand a great scientific effort, and on the other much specialised training of pilots and radio navigators. Consequently it was developed slowly and somewhat painfully. The problem of detecting, intercepting and identifying an enemy aircraft at night was far more severe than that of attacking him. For one thing, the final approach had to be done by visual means, and the range at which this was possible varied tremendously with background and with what sort of a night it was. In moonlight it might be half a mile; on a dark night against a starlit background perhaps 200 yards. It was found that, in general, the only way to bring off an interception was to get behind and overtake in the same direction as the

enemy was flying. Recognition had to be by silhouette, and the danger of shooting down a friend was ever present. The function of airborne radar was to enable the attacker to get within visual range and, if he lost sight of the target, to regain it.

The defence worked on the same principles as it did in the Battle of Britain, but in 1943, we observe an advance in organisation. When the Group Commander has planned the battle and deployed the forces, the Sector Commander takes them over, but a regular procedure at night is now to delegate the responsibility for detailed interception to the G.C.I. station with its highly organised radar display.

Let us suppose it is an evening in October, 1943.

We are at Sopley G.C.I. station in No. 10 Fighter Group. Sector headquarters is at Middle Wallop, and Group headquarters at Colerne, near Bath. The Chief Controller Sopley has a fighter controller in the main display room, and two more controllers in separate cabins called the Yellow and Red cabins. A raid is coming in from the Cherbourg Peninsula, and is heading for Portland Bill. The target looks as though it will be Bristol.

The Group Commander has planned the defensive programme for the night. Orders have been issued to Sector, and three of the Beaufighters from Middle Wallop are already on patrol twenty miles south of the coast between St. Catherine's Point and Portland Bill. Let us follow the fortunes of one of them, whose call-sign is Blanket 32. The pilot is Flight-Lieutenant Stokes and the radio navigator is Flying Officer Mortar. At 6.30 p.m. Stokes was taxying gingerly round the perimeter track at Middle Wallop checking out with flying control on his R/T. He is cleared and roars away into the darkness.

Stokes climbs to 6,000 ft. over base, changes R/T frequency, and reports himself to Sector. The Sector Controller hands him over to Sopley Fighter control. Let us say Springboard is Sopley's call-sign. Stokes calls up: "Hullo, Springboard; hullo Springboard. This is Blanket 32. Do you hear me? Over". Almost at once comes the laconic voice of the Fighter controller: "Springboard to Blanket 32. Hearing you loud and clear. Vector two zero zero, angels 10". (Which means: "Set course of 200 degrees and fly at 10,000 feet"). This course takes Stokes across the coast and twenty miles south of it. He maintains his vigil for about half an hour, during which time he is handed over to the Yellow cabin controller at Sopley on another R/T frequency.

At 7.22 p.m. Yellow cabin controller says: "Blanket 32 from Springboard. I have some bandits for you, approaching from one eight zero angels 10. Vector one niner seven. Maintain angels 15." Stokes is then given future courses and alterations to height until he is close to the incoming bombers. At this stage Yellow cabin controller tells him to search with his airborne Radar (A.I.) and gives him the course, height and speed of the enemy.

Flying Officer Mortar, his radio navigator, is sitting in the back seat of the Beaufighter, with his eyes glued to the Cathode Ray Tube. His voice comes through on the inter-com: "Navigator to captain; contact". Mortar indicates that the targets is at three miles range above and to the right. His job is now to direct Stokes to a position behind the enemy at a range of approximately two miles. Mortar then tells Stokes to throttle back until the range remains constant, that is, he is travelling at the same speed as the enemy.

As he flies through the night, as yet having seen nothing, Stokes makes a rapid mental appreciation. No cloud—had probably better approach from below—enemy will have sky for background—should be able to see him before rear

gunner, seems to me. Meanwhile, Mortar's voice is coming through on the inter-com: "Navigator to captain—increase speed by 20—hold—ease off—hold—port a little—steady starboard a little..."—thus enabling Stokes to approach slowly on the same course from behind and below.

At last Stokes sees the enemy aircraft against the sky. Keeping below, he looks for features such as the shape of the wings, the number of engine nacelles and the position of the exhaust flames, so as to identify the aircraft he is intercepting. He recognises the aircraft as a Ju.88. The aircraft is not unlike his own, the Beaufighter, so that as a final check he looks at the tail plane. He looks for the characteristic taper which will identify it from the Beaufighter. A moment more and his decision is taken. It is a Ju.88 and so far he is unobserved.

Stokes now drops back to range of 200 yards, gently raises his nose, gets the Ju.88 in the faintly illuminated ring of his reflector sight—and presses the firing button. There is a great gout of flame and Stokes banks steeply to avoid the burning debris. Twisting his head round, he watches the Ju.88 spiral down till it hits the water with a bright flash. He makes a quick check to locate any damage, and then gets ready for the next round. Yellow controller comes up again: "Vector zero seven five, zero seven five, angels 7. Stand by for second bandit". So through the night the game of hide and seek continues, in which those on the ground and those in the air, unseen by each other, yet with the mutual confidence of hard training, contrive the undoing of the enemy.

I have put a certain amount of detail into the story of night interception in 1943 because I want to emphasise that in the study of air defence it is most important not to overlook the point of view of the men who actually do the job: the air crew, the controllers, and the flight and squadron commander. Neither organisation nor plans which do not come to grips with practical issues are likely to work or to command the confidence of the men at the business end.

From 1943 onwards, the same work was carried on until, after a last effort by the *Luftwaffe*, in the spring of 1944, the enemy bombers no longer ventured, at least in any numbers, over our coastline.... The pattern of the defence wove itself into the pattern of the offence until the whole design attained coherence. Not until we had survived the Battle of Britain, and Fighter Command had given the requisite measure of security to our main base, could the Government contemplate large-scale overseas operations.

From then onward our air operations were concerned with extending our zone of air superiority farther and farther away from London and the Midlands, over the great Continental estuaries, and, with the help of our American colleagues, over the Westphalian plain into the heart of Germany. In due course, our Navy was to transport our Army to the Continent under the presiding wings, and the Army and Air Force at last pushed the Luftwaffe and the S.S. rocket batteries out of their bases in time, but only just.

All the same, the future does not put most people into one of their happier moods. Let us face the problem squarely. A good air defence is very costly; but a bad air defence is ruinous. Furthermore, the better that the U.N.O. progresses, and the more furiously that peace rages, the more acute will be the difficulties of maintaining general agreement on the scale of air defence that ought in the circumstances to be kept up. Whatever we do have, in quality it ought to be the best we can afford, for we can only afford the best; it ought also to be a little more than ready, for it should if possible be a lap ahead.

It should be remembered that the last word on the problem of interception is never said, and that all target-seeking missiles contain the seeds of their own destruction. However much we are able to keep the technique of Air Defence in the forefront of technical progress, it is no use pretending that it can be a substitute for the offensive use of air power. The best deterrent to armed aggression, and indeed the only real answer to it, is the science, the strength, and the confidence of our punch. And this truth will deepen as the destructive power of weapons grows.

Take a glance at the relationship of air defence with the future growth and texture of the British Commonwealth and Empire. I am going to suggest a metaphor. Let us call Great Britain and particularly London, the stomach of the Empire. The stomach in relation to the body, and Great Britain in relation to the Empire have some points in common: first, in respect of their lack of natural protection, and secondly in respect of their service to humanity as a focus of morale. Now it is inconvenient to fight anyone who may hit you below the belt, but having to fight and defend your stomach with indigestion at the same is really awkward.

Bear in mind a few simple facts. The land of the British Isles is roughly 100,000 square miles and contains 48 million people, of whom 8,500,000 are crammed into the 700 square miles of Greater London. The land area of the Commonwealth, excluding India, is 13,000,000 square miles, and its population is 150 million. Hence, whereas Britain contains nearly one-third of the population, it is about 130 times as small. As a stomach, it is overfilled.

Commonsense would seem to suggest that it would be to the mutual advantage of various members of the Commonwealth if we did what we could to spread out a bit more evenly. Deliberate creation of alternative sources of supply and manufacture in the countries of the Commonwealth, linked up by improving communications, would be a form of strategic dispersion. It would not only ease the problem of air defence, but would assuredly promote Imperial health. To pursue the metaphor, we might even compare such higher level of activity in the limbs of the Commonwealth to the beneficial effect that exercise of the arms and legs has on the relief of indigestion. In the unhappy event of peace breaking down, it would be much harder for an aggressor to inflict crippling damage—indeed, there would be less temptation to try it—on a system without such a super-sensitive solar plexus.

Twenty years ago a lecture was given on this platform on the subject I have talked about. May I end by quoting a passage from the lecturer's final remarks:

"And last of all, in this Institution it is perhaps just and appropriate to emphasise that a real scheme of Air Defence is not a mere selfish national consideration; it is in fact the strongest link in the great and delicate chain of Empire".

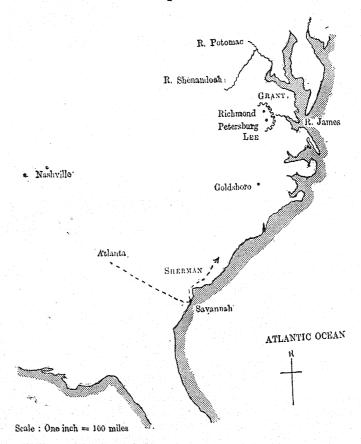
R. A. Aero Club.

The R. A. Aero Club (India), formed in Delhi to encourage flying as a sporting and recreational activity, has purchased its first aircraft. Membership is open to officers who have served in the R.A. or the Royal Indian Artillery. Indian officers are especially welcomed. Annual subscription is Rs. 30 for flying members; Rs. 15 for non-flying members. With financial backing from the R.A. Station Messes Fund (India) and from the Civil Aviation Directorate in India, it is hoped that the cost of flying will not exceed Rs. 20 per hour.

A FASCINATING PARALLEL

By F. G.

I have been greatly struck by the similarity between the closing stages of the American Civil War in 1865 and the closing stages of World War II in Europe. Indeed, the situation bears such a close resemblance that one is tempted to overstress the likeness. But this is hardly necessary. Events speak for themselves, and here is the set up.



By the end of 1864 the American Civil War was being fought on three main fronts:

- (a) In the East the great ROBERT E. LEE, commanding the Confederate Army of Northern Virginia, faced the Federal C.-in-C. ULYSSES S. GRANT, whose Headquarters were with the Army of the Potomac.
- (b) In the South, the Confederate HARDEE was beating a steady retreat before the Federal SHERMAN, who had just completed his famous march "from Atlanta to the sea", which he reached at Savannah.

(c) In the West the Confederate Hood was in full retreat after his disastrous defeat by the Federal Thomas at the battle of Nashville. The remnants of his army subsequently joined forces with HARDEE, who was superseded by Johnston.

In February 1865 Lee was appointed C.-in-C. of all the Confederate forces, a function which, up to that time, had been exercised by the President, Jefferson Davis. In addition, Lee retained command of the Army of Northern Virginia.

At this time the Army of Northern Virginia was strung out along a 37-mile perimeter defending Richmond, the Southern capital, and Petersburg, 18 miles to the South. The army, which had fought a long and exhausting series of defensive actions from the beginning of 1864, until it was finally bottled up in its present earthworks, was now suffering from extremes of fatigue and lack of supplies. Grant, moreover, had unchallenged command of the sea, and a numerical superiority of roughly 2 to 1.

For six months he had been trying to force a way through the Richmond and Petersburg defences, and to finish the war by seizing the Confederate capital. But Lee's masterly handling of his steadily dwindling forces had time and again foiled Grant's plans, and, when the campaigning season of 1865 opened, he was still far from achieving his object.

Lee however, was seriously worried by the increasing rate of desertion in his army. Often, in previous years, men had deserted between battles, returned to their farms to see their wives and families, and then rejoined the army before the next battle. But now they were deserting and not returning. The Federal Sheridan's successes against the Confederate Early in the Shenandoah Valley, from where many of Lee's men were recruited, and Sherman's irresistible advance into South Carolina, was having the most depressing result on the morale of the Confederate troops. The call of home and family was proving stronger than the call of patriotism and duty.

Again, owing to uncontrolled inflation, the Confederate currency was practically worthless. Farmers refused to sell supplies to the Government in exchange for useless paper money, and the feeding of the army suffered in consequence. The men were exhausted through overwork and continuous defence.

Lee, feeling that only by offensive action could his army retain its cohesion, made a last despairing effort to regain the initiative. The point he chose for his attack was a work called Fort Stedman, and the operation was entrusted to one of his best Corps Commanders, General Gordon. Lee hoped, by a successful exploitation of the break-through at this point, that Grant, who was steadily extending his left flank so as to threaten Petersburg from the South, would be forced to strengthen his right at the expense of his left. This would give Lef a chance to join forces with Johnston and strike at Sherman before Sherman could join forces with Grant.

SHERMAN, by now, was getting dangerously close, and had already reached Goldsboro.

Gordon's Second Army Corps was specially reinforced for the assault, and also given a detachment of cavalry, whose particular task was to be the destruction of Federal communications and bridges. As soon as Fort Stedman was captured, the assaulting troops were to wheel to their right and sweep down the Federal entrenchments, the movement being supported by other troops holding the Confederate lines as fast as their fronts were cleared. The attack was a failure, and can best be described in Lee's own words:—

"I have been unwilling to hazard any operation of the troops in an assault upon fortified positions, preferring to reserve their strength for the struggle which must soon commence; but I was induced to assume the offensive from the belief that the point assailed could be carried without much loss, and the hope that by the seizure of the redoubts in the rear of the enemies' main lines, I could sweep along his entrenchments south, so that, if I could not cause their abandonment, General Grant would at least be obliged so to curtail his lines that, upon the approach of General Sherman, I might be able to hold our position with a portion of the troops, and, with a select body, unite with General Johnston and give him battle.

"If successful, I would then be able to return to my position, and, if unsuccessful I should be in no worse condition, as I should be compelled to withdraw from James river if I quietly awaited his approach. But although the assault upon the fortified works was bravely accomplished, the redoubts commanding the line of entrenchments were found enclosed and strongly manned, so that an attempt to carry them must have been attended with great hazard, and, even if accomplished, would have caused a great sacrifice of life in the presence of the large reserves which the enemy were hurrying into position.

"I therefore determined to withdraw the troops, and it was in retiring that they suffered the greatest loss. I fear now it will be impossible to prevent a junction between Grant and Sherman, nor do I deem it prudent that this army should maintain its position until the latter shall approach too near."

This assault took place on March 25, 1865, and the survivors of Gordon's attacking troops were back in their own lines within four hours. The Confederate casualties were about 4,000.

With his last hope of seizing the initiative from Grant irretrievably lost, Lee now had no alternative but to pull out of his extensive fortifications, which he no longer had the troops to man. On April 2, the withdrawal from the Richmond and Petersburg defences began. Grant followed up like lightning, and, a week later, on April, 9, he had, without the aid of Sherman, captured or destroyed the whole of LEE'S once great army. In the final surrender at Appointance Court House, 28,356 officers and men of the Confederate army were paroled.

With the surrender of Lee's army, the Confederacy collapsed. The only organized force left was Johnston's in North Carolina. He concluded an armistice with Sherman on April 18, and 37,047 men were paroled in the final surrender. Jefferson Davis, the Southern President, was himself captured on May 10, and all fighting ceased on the 13th.

HISTORY REPEATS ITSELF.

In December 1944, the situation confronting the German Armies was as follows:

- (a) In the West, manning the Siegfried line, Runsted's army faced Eisenhower.
- (b) In the East, Guderian faced the Russian Zhukov, who was pushing steadily nearer Berlin.
- (c) In the South, in Italy, Kesselring faced Alexander.

The German armies in the West had been in continuous retreat from June 6, when the Allies landed in Normandy, until they managed to halt the Allied advance when it reached the Siegfried Line. Eisenhower then started a series of frontal attacks at different points in the line. He had unchallenged air supremacy, and a large numerical superiority. Some observers estimated that these bludgeon blows were costing the Germans some 6,000 men per day, and, although the amount of ground gained was small, yet Runsted realized that he could not afford to suffer such a casualty rate indefinitely. Sooner or later his army would crumble away. Desertions were increasing, facilitated by the chaos created behind his lines by the incessant Allied bombing. Many of his troops who came from East Prussia were already "looking over their shoulders", as the Russians invaded their homeland.

In these circumstances, he, too, made a last despairing effort to regain the initiative. He hoped to break the Allied grip on his army, so that he might join forces with Guderian and strike at Zhukov, before the latter could unite with Eisenhower. The point chosen for the attack was in the Ardennes, with the object of creating a diversion at a weak point in the Allied lines and seizing Liege and Namur. If these successes could be exploited, Antwerp and Aachen would be threatened.

To a limited extent, this thrust was successful. It certainly caused the Allied commanders to regroup their forces. Everything was concentrated on the destruction of Runsted's few remaining Panzer units, to the detriment of other attacks on the Siegfried Line which were then in progress. But the initial break-through failed to reach any tactical objective, and the advance was halted four miles North of the River Meuse.

From this moment onwards, it was only a question of time before the ground lost by the Allies was regained. Runsted, having shot his bolt, now had no alternative but to pull out of the Siegfried line, which he no longer had the troops to man. His efforts to unite with Guderian were unsuccessful, and the German armies, like the Confederates, were forced to surrender independently.

Holy Hermit Pays Tribute To Gurkhas

In memory of the men of the 4/4th Gurkha Rifles who lost their lives in the attack on Mandalay Hill during the late war, the Holy Hermit of Mandalay Hill, Rev. U. Khanti, is placing a memorial tablet in a pagoda on the summit of the hill. He is also presenting the battalion with a bell taken from one of the pagodas.

On the night of 8th March 1945, the Gurkhas attacked the Japanese stronghold on Mandalay Hill. The attack succeeded and 89 Japanese were killed for the loss of nine Gurkhas killed and 40 wounded.

The hill, with its many colourful pagodas and Buddhist shrines, is the centre of the Buddhist faith in Burma. To help repair the damage that was done to the shrines during the attack, men of the 4/4th Gurkhas have contributed a sum of Rs. 2,500.

INDIAN ENGINEERS' NEW HONOUR

BY LIEUT.-COLONEL. M. E. S. LAWS, O.B.E., M.C., R.A. (ret.)

THE grant of the title "Royal" to the Indian Engineers has given well deserved recognition of the long and admirable service of the Indian Sapper. Few Corps in the Indian Army have suffered more periodical outbursts of economy, but despite all difficulties the Indian soldier has shown that he is well able to master the technical problems which confront the military engineer under modern conditions of warfare.

In the early days of the East India Company the few military engineering problems that arose were referred to an individual styled "The Gunner", who was regarded as an expert on all scientific subjects and who was often in fact a sailor. But as the defences of the Company's trading posts inevitably became more elaborate, it was found necessary to employ a few European engineer officers to design new works and to supervise their construction by civilian labourers.

Gradually and reluctantly the Company became involved more and more in political disputes with the neighbouring rulers, and in con equence found itself committed to military operations far beyond the passive defence of its factories. When therefore the Company's forces took the field in mobile warfare, the engineer officers were responsible for supervising the hired civilian labour employed in siege works, keeping open communications and similar tasks normally undertaken by Sappers.

The unsatisfactory nature of this arrangement became obvious, for the engineer officer had to depend on technically untrained craftsmen who moreover were not subject to military discipline. It was at first proposed to overcome this difficulty by enlisting a company of foreign artificers, but in the end the Court of Directors compromised by raising for Bombay a Company of Pioneer Lascars on 13th December 1777. This unit, which did excellent work in the First Maratha War, may be said to be the beginning of the Royal Indian Engineers.

The example of Bombay was followed three years later by Madras, where the temporarily enlisted and quite untrained Pioneers were replaced by two regular Pioneer Companies, which were armed with pistols and pikes. So successful was the experiment that the two Companies of 1780 became a Battalion of six Companies in 1793, and ten years later the Madras Pioneers consisted of sixteen Companies organised in two Battalions. In 1803 the Bengal Army also decided to abolish its temporary units and to establish three regular Pioneer Companies, which were raised at Cawnpore. Meanwhile the original Company of Bombay Pioneer Lascars had grown by 1797 into a "Corps of Pioneers" of four companies. It is of interest to note that the Bombay and Bengal Pioneers wore a green tunic, while the Madras unit adopted blue.

Thus by the beginning of the 19th century the East India Company's armies had at least a nucleus of regularly enlisted Pioneers, but the situation was not altogether satisfactory. For one thing the engineer officers formed a Corps quite apart from the Pioneers, who were officered from the Infantry, so that the Sapper officer was not responsible for the training or administration of the rank and file with whom he was associated in war. Furthermore the Pioneers

were simply civilian craftsmen, enlisted, drilled and armed, but by no means expert in the technicalities of field engineering and the mysteries of mining and siege warfare. This point was very forcibly demonstrated by the British failure to storm the strong fortress of Bhurtpore in 1805, despite the acknowledged gallantry of the troops. The repulse at Bhurtpore had a serious effect on British military prestige in India, and caused the authorities to increase the cadres of engineer officers; it did more than that, for it demonstrated the necessity of maintaining engineer units as opposed to Pioneers.

In 1819 the Bengal Army took the lead by converting two of its eight Pioneer Companies at Allahabad into the nucleus of a corps of Bengal Sappers and Miners consisting of six companies, to which a few British N.C.Os were attached. This corps was officered by Bengal Engineers, and was dressed in scarlet tunics with blue collars and cuffs, blue trousers and blue pagri with red kullah. Bombay immediately followed the example set by Bengal and in 1820 expanded an existing small Pontoon Train into a company of Bombay Sappers and Miners on an establishment similar to that of the Bengal Sappers and Miners. The Bombay Pioneers were retained as a separate Corps. Madras also intended to form a separate engineer unit in 1818, but suitable recruits were diverted to the long established Pioneers and the new unit was never formed. In 1831 however the 1st Battalion Madras Pioneers was converted into the Corps of Madras Sappers and Miners with its eight Companies commanded by Engineer officers.

By 1831 therefore each of the three Presidencies had Engineer troops as well as Pioneers, but as there seemed no likelihood of large-scale warfare breaking out and as economy was as always an important consideration to the Court of Directors, it was inevitable that the Pioneers should disappear. It was considered that their duties could be performed as well and more cheaply by hired civilian labour, leaving the Sapper and Miner units to undertake the more technical field engineering work. In 1830 the Bombay Pioneers were absorbed into the Sappers and Miners or, as the latter corps had been designated since the previous year, the "Bombay Engineers". In February 1834 both the Madras and Bengal Pioneers were absorbed into their respective Sapper and Miner Corps and the Indian Army was left with Engineer units but without Pioneers. It is true that Pioneers made a brief reappearance in 1847 when the Bengal Sappers and Miners changed their title to "Sappers and Pioneers" on the introduction of seven Pioneer Companies to compensate for a reduction in Sappers: this was purely a measure of economy and the Pioneers disappeared in 1851 when the former title was resumed.

It is impossible in a short article to deal adequately with the numerous battle honours of the Sappers and Miners. The Bengal Corps won its first notable success at the storming of Bhurtpore in 1826, and collected further laurels in Afghanistan, the Punjab and Central India. The Madras Sappers and Miners had their baptism of fire in Malaya in 1832 and subsequently fought in Coorg, Burma, China, Sind, and Persia. Bombay Sappers were engaged in the First Afghan War, in Kolhapur and in the 2nd Sikh Campaign. When the Mutiny broke out, about 40% of the Bengal Sappers and Miners remained loyal and three weak companies fought with the besieging army before Delhi, as also did some 900 unarmed and hastily enrolled Pioneers. The Engineers' work at the siege and capture of Delhi, culminating in the blowing in of the Kashmir Gate was a record of which the Bengal Sappers and Miners and the Pioneers may well be proud. Three Companies each of the Bombay and Madras Sappers and

Miners served in the suppression of the Mutiny, and the remaining units of these Corps remained loyal.

When the British Crown assumed control in India, the European officers of the Bengal, Madras and Bombay Engineers were transferred to the Royal Engineers, but the three corps of Sappers and Miners remained on the establishment though with some reduction in strength. Three Companies of Royal Engineers were also stationed permanently in India. There were no Sapper and Miner units in the Punjab Irregular Force (later Frontier Force), but the Pioneers from the Punjab, who had won fame in the Mutiny, were retained.

The Indian Sappers and Miners took their full share of the fighting after the Mutiny, though they were not always employed on the minor Frontier campaigns. All three Corps took part in the Second Afghan War and both the Bombay and Madras Sappers and Miners fought in Abyssinia in 1867. The Madras Corps supplied a Company for the Perak Expedition of 1875, and both the Bombay and the Madras Corps were represented in the Malta Expeditionary Force of 1878. Madras Companies took part in the Egyptian War of 1882 and in the Suakin Expedition, while others of the corps fought in the 3rd Burma War. Bombay Sappers and Miners also fought in Somaliland in 1890 and in 1903; on the Mekran coast in 1898 and in 1901 and at Aden in 1901 and 1904; all three Corps sent units to China in 1900. In the later Frontier campaigns the Sappers and Miners also took a distinguished part.

Meanwhile some changes had taken place in organisation, and in 1897 it was decided that the order of precedence should be Madras, Bengal and Bombay in that order. In 1903 the Corps were numbered 1st (Bengal), 2nd (Madras) and 3rd (Bombay) and the Companies were renumbered throughout the Indian Army, instead of within their own particular corps. The object of these changes was to consolidate the Sappers into a single service without interfering with the traditions of the old Presidency armies. An Indian Submarine Mining Company had been formed in 1891 and Electric Light Defence Sections were also established for the defence of fortified harbours. The Bengal Corps had an experimental Balloon Section in 1901 and Madras and Bombay had Telegraph and Printing Sections.

The Sappers and Miners expanded greatly during the 1914-18 War. The nineteen Field Companies of 1914 became fifty-six Field Companies by 1918, while the three pre-war Depot Companies were increased to thirty-eight before the war was over. These units fought in France, Mesopotamia, Persia, East Africa, Aden, Egypt, Palestine and the North West Frontier. In some cases—notably in France—they fought as Infantry in emergency, but normally they were employed on engineering duties of every type. Hardly had the First World War ceased, than the Indian Army was engaged in the Third Afghan War, in which no less than three Field Troops, twenty-three Field Companies and three Railway Companies of the Sappers and Miners were engaged.

On the conclusion of the Great War of 1914-18 the Sapper and Miner Corps were reorganised so as to include Field Companies, Divisional H. Qs Companies, Army Troops Companies, Field Troops, Bridging Train, Railway Companies, Fortress Companies and Defence Light Sections, Photolitho and Printing sections. In general these changes brought the Indian Engineer corps more into line with the Royal Engineer organisation at Home. Moreover, certain units were removed from the Madras Sappers and Miners to form the nucleus of another corps—"The 4th Burma Sappers and Miners". In 1923 the

Sappers and Miners Corps dropped their numerical titles and became respectively The King George's Own Bengal, The Queen Victoria's Own Madras, The Royal Bombay and The Burma Sappers and Miners. In the same year also the four corps of Pioneers—Madras, Bombay, Sikh and Hazara—were abolished, though many of their men were transferred to the Sappers and Miners and their officers to the Infantry.

The decision to disband units with such fine fighting recorde was taken with great reluctance, but there can be no doubt that, under conditions of modern warfare, field engineering is a specialist job for specialist troops and there was no longer any justification for retaining Pioneers. Furthermore the reduction of the Pioneers permitted a higher establishment of Sappers and Miners to be maintained and thus materially contributed to the increased efficiency of the latter units.

The exploits of the Indian Engineer troops in the Second World War are too well known to require detailed description. Once again an enormous expansion took place, and despite an initial shortage of modern technical equipment, new units of every description were raised, trained and sent overseas. The Indian Sappers fought in East Africa, the Western Desert, the Tunis and Italian campaigns, in Syria, in Malaya, in Burma, in Greece and on the North West Frontier. As a result of the First World War the Bombay Sappers and Miners were awarded the title "Royal", and it is indeed fitting that this honour should now have been extended to the whole Corps of Indian Engineers for its magnificent record in the Second World War.

G. H. Q. Signals

Beginning six years ago with only one wireless set operated by four men, G.H.Q. Signals has developed into an organisation dealing with more than 250,000 words a day. During the last 29 months of the late war this unit handled over 215 million words in 3,500,000 messages, about one-tenth of which were in cypher.

Among a few of the wireless circuits which carried these messages were those working to London, Singapore, Melbourne, Nairobi, as well as to centres in India and Ceylon. The monthly wartime average of words received and despatched by the G.H.Q. Signal Office was just under 8,000,000.

During the closing stages of the war in Burma signal traffic soared high and on 4th August 1945, it reached its peak of 514,943 words.

Monetary Awards for Servicemen

About 12,500 jangi inams have been sanctioned for distribution among personnel of the three fighting Services who rendered meritorious service during World War II. In addition, 200 honorary commissions are being granted to deserving V.C.Os.

The jangi inams will be worth Rs. 20 per month for Gurkha officers, V.C.Os, and Indian Warrant officers of the Indian Army, Indian commissioned-warrant officers and other warrant officers of the R.I.N. and for warrant officers of the R.I.A.F. Indian and Gurkha soldiers, ratings, airmen and enrolled non-combatants will receiv. Rs. 10 per month.

The grants will be admissible from 1st April, 1946. In the case of personnel who have died, jangi ináms will be paid to their heirs.

ENGLAND - JUNE, 1946

BY "CECIL VARCUS"

MUCH has been heard of the many restrictions to liberty in England; of the lack of proper food and clothing of domestic difficulties; of the dirt and grime of London; of the bad manners of many; and of the general weariness of all. Yet in spite of all these ugly rumours we still find men in all three Services only too anxious to return to their country and their jobs, if any. My wife and I felt, therefore, that there must be something good and solid still left, and we determined to find out for ourselves; to see show these ex-Servicemen were faring; and to see whether there had been disillusionment. We were not disappointed.

Custom officials are generally looked upon as a sort of Gestapo—a kind of uniformed tyrant, stamping about with his heavy boots, glaring at us in an endeavour to pierce our frail defences and expose our innermost secrets to the gaze of the common multitude standing patiently around in a state of nervous expectation. They are, in fact, nothing of the sort.

The customs official is just another kindly human person, most likely with a wife and kiddies, who has been put there for a purpose and who, if treated sensibly and courteously is capable of the finer feelings. He appreciates honesty, truthfulness and help; he detests deceit, lying and bad manners. If we help him by presenting him with a complete list of all our dutiable articles, showing him where they are, and adding any special comments as to why we have them, more than likely he will pass the lot without fuss or without even wanting to look at any of our treasures, still less to dismember our trunks.

If, on the other hand, we try some funny business he can go one better than us, and with authority behind him. He usually wins. He is specially considerate to the Services, and to people who have been absent from Home for a long time. It is usually preferable to be last than first through the Customs if you have a lot of dutiable goods to declare!

In travelling we meet the English at their best. Long suffering, cheery, helpful and even talkative if you begin first. They certainly had something to put up with during the long years of fire watching, bombing, doodle bugs, rockets and long distance shelling.

There is a general shortage of railway stock, porters, barrows and taxis. What few of the latter there are work all out during the rush periods. Weekend travelling is a nightmare; no reservations are permitted except on medical certificate. Mostly all carriages on the railways are of one class only; queues line up outside the platform gates, and when they open the rush for seats begins. Soon corridors are packed with human beings, standing or sitting on suitcases.

Getting to the restaurant car—if any—becomes an acrobatic feat, involving stepping over humanity, compressing one's anatomy to the dimensions of Noel Coward's Blythe Spirit, avoiding burning the back of the man's hair if you are smoking, and generally hanging on to swaying door handles and window bars. It is, however, worth doing, since the reward at the end of on 's troubles is a battle of good English Worthington.

The Underground, too, is troublesome during the rush hours, when it is apparently the policy to squeeze the last ounce out of available standing accommodation. As long as doors can just close upon the tightly packed mass of people inside, safty-first regulations have apparently been achieved. It is impossible to fall down when the train lurches, since you are well propped up by the other "sardines" around you. To get out of the carriage at your destination, too, is an acrobatic feat requiring much patience, perseverance and good humour. Buses are not permitted to be so crowded, but bus queues are long and wearisome. Taxis can seldom be obtained from a taxistand, and taxi queues are always to be seen, especially at week-ends. Woe betide the individual who tries to gate-crash a taxi queue!

Hotel accommodation is available in London if booked a week or so ahead, but you are only allowed to take it for a maximum of seven days. There are, however, one or two hotel *cum* boarding houses, though not in the heart of London, where there is no time limit for residence. The Over Seas League in Park Place, St. James's, has excellent single and double accommodation for about 14s. 6d. per head for bed and breakfast, with comfortable suites, each with its own private bathroom. Wherever one stays, however, there is a seething population ceaselessly milling to and fro, as restless as the proverbial ant. I suppose all hotel charges are at least double pre-war prices, if not more. Seaside hotel accommodation this summer averaged 7 to 10 guines per head per week.

Unfurnished flats are impossible to get; you are just laughed at if you summon up courage to ask. Furnished flats are snapped up by telephone as soon as any notice goes up in a club, if not before. They are certainly gone by the time the advertisement appears in a paper—if ever it does. They are expensive, and vary between five and a half guineas to 12 or 15 guineas per week, according to the number of rooms (usually only two) and their location. Small fortunes are being made out of house property, which is generally three or four times the pre-war value. Yet they sell; in fact, they are snapped up. Every house advertised has at least forty people inquiring about it the next day. £4,000 appears to be the average price for a house valued before the war at £1,200.

The less said about furniture and carpets the better. Prices are really preposterous, bearing in mind their real value. A very ordinary cane settee, two similar chairs and a miserably looking small table were priced at £57. 10s. Small Persian carpets fetch anything up to £175. It takes months to get a small advertisement in a London paper—sometimes as long as sixteen to eighteen weeks, by which time the article has probably been sold privately.

In small households the ration does not go very far. People are short of the basic items and get little variety. Larger households fare better, and a man with wife and five small children has little difficulty in food matters. A reasonable meal of three courses can be obtained at all restaurants, the meat usually being pigeon or rabbit, or occasionally duck at the higher class hotels. Sometimes even a roast moorhen appears! Controlled price for a meal is 5s., but higher class establishments add house charge, bringing your lunch up to 7s. 6d. or dinner 10s. 6d. Clubs are the cheapest places at which to feed.

One misses the daily egg or eggs for breakfast; only one per week, and one issue of bacon; one misses also the daily meat dish and fresh or tinned fruit to which we are so accustomed in India. Food becomes monotonous through lack of variety, and deficiencies of basic essentials. In consequence, whole families

frequently flock for the day to London or elsewhere for a restaurant meal, thereby saving their own food coupons. No coupons are demanded for casual meals, and hotels only take them if you stay five days or over. Bread is getting browner, and is now rationed. It is not allowed to be served unless you ask for it. Food parcels from abroad have been a godsend, but of course thousands never receive any.

As regards drink, you can get whisky, gin and sherry in clubs, pubs and bars generally, but you can't buy a bottle—unless "under the counter" and at a price. You can generally get English beer at all pubs, although sometimes they are closed through being "out of stock". Wine shops always seem to be in that predicament. Their small stores of beer, stout and cyder are booked up and removed at a very early hour!

What of The Home? It is truly a sad sight. No regular maids, and only a woman in once a week to wash. The eternal round of bed making, cooking and washing up. All have to help—host, hostess, and guests alike. A soulless job, believe me. How we longed for the latest modern inventions—cookers that cook and keep your meal hot; electric washing-up machines that sweep the plates clean of food and grease, dry them and put them in the rack; roller conveyors that carry plates from the dining room through the hatch into the washing-up machine and on to the rack (a gadget for the future?) an electric bed maker; and an electric patent to move beds to and fro; and so on. Until such things are invented life for the poor house-wife living in a large house will remain difficult. Irish or Czech girls, especially the latter, are well worth trying to get.

And then the garden! If you are lucky you may be able to get a gardener two hours a week, but generally you have to do it yourself. I know of the wife of a person who lives in a large vicarage and has an enormous garden, does all the gardening herself in her spare time, is up at six o'clock every morning—and must be at least sixty years of age.

People queue up for everything. It has become a national habit, and is resignedly accepted by all as part of the daily task. I even had to queue to go to bed—I mean, of course, to get my key. A retired Lieut-Colonel, aged 56, said he enjoyed standing in the daily fish queue, since it afforded him glorious opportunity of airing his politics. It was better than a club, since its members could not leave when they had had enough!

All clothing, of course, is severely rationed. People who have been abroad a long time, however, are well treated. My wife was given 104 supplementary clothing coupons by the Board of Trade. Folk generally are very short of clothes, yet the women always manage to look well turned out. Sometimes one sees queer outfits. We once saw a youngish blond dressed in brown corduroy trousers, a pair of old sambhar shoes, a bright red mackintosh, with a red and white spotted handkerchief over her head. Her large shopping basket was full.

Few people wear evening dress; it is usually worn only at the higher class hotels for dinner and dance. On the other hand, when evening dress is worn, tails and white tie are much in evidence. Prices for clothes, as for everything else, are fantastic, and the time-lag for the making of them still very long. A Donegal tweed suit costing £10 in Ireland is sold at £35 in England. Mellets (Victoria) Ltd., Government Surplus Disposals Dept., of 30, Wilton Road, Victoria, London, S. W. 2 sold me a very nice green press-button oilskin for 17s. 6d. This was better than paying twelve or fifteen guineas.

Manners have undoubtedly suffered as a result of war strain and other difficulties. On the other hand, one often comes across instances of really good manners and helpfulness. Courtesy on our part and a general air of sympathy were very quickly reciprocated. The ex-Serviceman re-employed in civil life is exceptionally helpful and cheerful. He seems quite happy and glad to be back at his old job, difficult though things may be. Taxi drivers we found to be helpful and willing, and satisfied with a reasonable tip. Most buses have women conductors—but they don't like being called "Conductresses." Generally they're cheerful and chatty.

One has only to emerge in London streets to meet old acquaintances. I met dozens—two or three nearly every day. Common meeting places are Grindlays' Bank, Piccadilly Circus, the India Office, hotels, and theatres. E. C. Os returned to civil life always recognise one and come up for a chat about old times, and it was always a pleasure to meet them again and recall experiences.

Booking seats at theatres is easier than it used to be. A few days in advance is frequently all that is necessary. Some of the good shows now on are: While the Sun Shines, at the Globe Theatre; a very amusing and clever wartime comedy by Terrence Rattigan—an old Harrovian; he has another play, too, at the Lyric, called The Winslow Boy. The First Gentleman at the Savoy Theatre is a very amusing and clever historical play of 1814; at the Pheonix Theatre is Under the Counter, a musical comedy with Cicely Courtnidge at her best; No Medals is a very amusing comedy and well worth seeing at the Vaudeville Theatre. The Night and the Music, with Vic Oliver, is an excellent show at the Coliseum; it is well produced and has any amount of colour and go. Make it a Date at the Duchess Theatre is a new revue with Max Wall as the comedian; it is a most amusing and entertaining revue. Perchance to Dream, an Ivor Novello show, was booked up at the Hippodrome for months ahead; but if you can go, it should not be missed.

Theatre stalls are either 13s. 6d. or 16s. Theatres begin at 6 p.m., 6-30 p.m., or 7 p.m. none are later than 7 p.m, which means there is just time to get a meal at some nearby place. Most such places close at 10 p.m., and handy restaurants for a good, well-cooked dinner are: The Salted Almonds, (Trocadero), The Vikings, Glasshouse Street, and the Aldwych Restaurant. The latter place was opened early in June, is underground, and is decorated to produce a cottage effect, with numerous stuffed black cats staring down at you from the rafters. The food is excellent, and beer or whiskey is available.

You all know how AIRBORNE won the Derby and confounded the hopes of millions of large and small punters. Stories continue to circulate about the lucky few who were "on him". One man apparently consulted the crystal. He put £10 on Airborne to win at 200 to 1. He extracted £2,000 from his bewildered and sobbing bookie, and promptly bought a house, or most of it. In the Oaks we had better luck, choosing Steady Aim out of Quick Arrow by Casterari out of Quick Change by Hurry on out of Broderia by Tracery. What speedier horse could we have chosen? Anyway, we quietly pocketed a cool £70 over the deal, which was proof enough!

Ascot was, of course, the wettest since some "way back" year. That, however, did not keep the crowds away. The place was full; everyone was in high humour; most brought their own sandwiches. Gordon Richards did not disappoint

the crowds and won a succession of races. The usual two-mile queue formed up outside the railway station.

Yes—the weather, the Englishman's never-failing daily topic. Up to July there was no summer worth mentioning since 1940. All sorts of records were broken for excessive rain or cold—but never for heat!

Victory Week—a memorable occasion. In spite of the gloomy prophets, the crowds thoroughly enjoyed themselves. It did everyone a lot of good to get away for a week from the horrors of the daily papers, and to realise that we really did win the war. Side streets leading to the main routes of the columns were packed with good humoured and excited people. Here are a few sidelights:

Well-designed souvenir programmes giving full details of the Victory celebrations and a diary of the war were quickly sold out; periscopes of various makes were on sale at 2s. 6d. or 1s. each (girls who could not buy one used the little mirrors out of their vanity bags, holding them up on high to catch an occasional glimpse of the procession); all traffic light standards were fully used by the acrobatic spectators; small tins and boxes were on sale for the short folk to stand on.

A rather drunken old lady was seen staggering along by herself, waving a small Union Jack aloft and singing lustily; red, white and blue colours were everywhere—in the shop windows in the form of ladies' coats, skirts and hats as decorations; as flags; and on periscopes. The Mall, Trafalgar Square, Whitehall and Westminster were exceptionally well decorated; the United Service Club, Pall Mall, threw open practically the whole Club to members and their guests both ladies and gentlemen; they ran an excellent running buffet from 11 a.m. to 3 p.m. and again from 6 p.m. to 10-30 p. m. and after that until midnight coffee and sandwiches were available.

A civilian in our hotel, not knowing we came from India, remarked that the bearing and drill of the Indian troops were wonderful, and quite equal to the Guards and better if that were possible. Altogether a great day and a great week.

Let me end by quoting that great world traveller whose travel films are famous, James A. Fitzpatrick: "I have been over the world constantly for twenty years, and I can say sincerely that I have never known a nation which has suffered so much and complained so little as the people of Great Britain."

A "HOME" NEWS-LETTER

BY MAJOR-GENERAL SIR DASHWOOD STRETTELL, K.C.I.E. C.B.

PSYCHOLOGICALLY, the effect of the Victory celebrations in London was good. Before they were held many people were of opinion that they should not be held. It seemed most unsuitable to hold public rejoicings with the world in the present unsettled state; with shipping so short, and food supplies so scanty. Moreover, it seemed wrong that we should bring into England large numbers of troops and crowd London with so many thousands of visitors when accommodation was so short. But as things turned out the Government was right.

I asked the India Office if they could provide my wife and self with seats to view the procession, basing my claim not on past service but on the fact that I was Colonel of my Regiment, and that a detachment of the P.A.V.O. would be in the procession. Their first reply was that there was little chance of their being able to do anything; however, by the courtesy of the Amenity Section of the Military Department at the India Office we were eventually given excellent seats on the Mall, in the garden of the old German Embassy. When I looked at the hundreds of people given seats there by other Government departments I wondered what reasons the seat-holders had given as a claim to their seats!

The Indian Army camp was well-run, and comfortable, but the bell tent, shared by four, is at best a difficult lodging in which to dress for a ceremonial parade, particularly as the tents, in the almost continuous rain, looked like sieves. Several of the Other Ranks, by the way, told me how very kind the ordinary people had been to them during their visits to other parts of the country. But let me say at once that in the Parade none of the troops looked smarter or better turned out than the Indian Contingent.

The Parade was a marvel of organisation. Most impressive was the mechanical section, in which every vehicle bore a large label, explaining its use. Thus everyone learned how complicated modern warfare has become. Perhaps the travelling laundry caused the most interest to the thousands of housewives among the spectators.

Of the marching contingent the women's Services were very impressive, and in bearing, marching and general smartness the A.T.S. bore away the palm. The only adverse criticism I make is that the cars carrying the various Cs. in C. went by so rapidly that there was no time to see the occupants. There was general regret that owing to industrial troubles in America General Eisenhower was unable to come.

Bread rationing, as you will have heard, is most unpopular. The projected saving (7%) seems insignificant; the scheme was obviously not well-thought out, for it has been amended continually; and it has caused immense extra work for staffs in baker's shops. There is a slight improvement in the number of articles available in shops generally, and the Government has promised even more improvement in the next few months. Nevertheless, it is generally realised that concentration on exports must continue for some time. The increased

ration of newsprint, which will mean larger papers, is to be welcomed, for people can now be given more two-sided views of current problems than the "selected views" which have been forced on them.

In London we have just been through a "gas strike". For some days we were practically without gas, and only those who have had to cook under such circumstances can realise what it means. The last two days of the strike it took us forty-five minutes to boil a kettle, while my wife cooked our food on an electric fire turned on to its back!

It is difficult to follow the reason of these unauthorised strikes, of which that of the gas employees is the latest. They are most unsettling and, I might almost say, ominous. It seems that Trades Union officials have little control over their men, and that the system of Trade Union control is at stake. In the case of the gas strike, negotiations between employers and workers had been going on for nearly a year, without result. The men made their unofficial strike—and the whole matter was settled in a week. It is certain that some more rapid system of negotiation is essential if as a country we are to hold our own in the industrial world.

The Third Test Match has been abandoned. Everyone was disappointed. It is said that this has been the wettest summer for 35 years. I can well believe it. It has, however, been very hard on the Indian cricket team, who have had to play in most uncongenial weather and in bad light. As a result the team has never really settled down. It has done some brilliant things—but it has also had some baddish failures.

Merchant is undoubtedly a batsman who would grace any team; Mankad is probably the best slow bowler in the world; Amarnath has been, at times, almost unplayable; Pataudi has been brilliant sometimes, but at others seemed to have lost his touch, and never seemed to have decided where in the batting order he should appear. His captaincy on the field has been of a very high standard, especially the placing of his field, unorthodox though it sometimes has been. In the field the team has not been very safe. In one innings eight catches were missed, but the ground fielding has been splendid and the throwing-in first-class.

India may be a little disappointed with the results of the tour; its high hopes have not been completely fulfilled, but, as *The Times* said: "If cricket when played keenly, enjoyably, with always a will to win, means anything to us to-day, than our thanks are due to this Indian team".

IN SEARCH OF SAILORS

By Commander E. C. Streatfeild James, O.B.E., R.I.N.

MUCH is spoken and written about the "spirit of the sea" the "tang of the salt sea air" and the "breed of men who go down to the sea in ships." Do these men differ in any material way from other human beings? If so, what are these differences, and where are such people to be found for the manning of our ships?

The atmosphere which pervades the sea-faring communities has a very real sameness throughout the whole world, but it is open to discussion as to whether this is not inculcated by ship life rather than by any prenatal influence. It is I think fair to state that whatever complex be placed upon this phenomenon, the fact remains that the generic being is still definitely part of the human race.

The influence of the salt sea breeze and the sight of vast expanses of water, together with the sound of waves breaking upon the sea shore, cannot be denied, and it is therefore only natural that the people whose homes border the sea coast should be more amenable to sea life than those who have been born and bred far from such influences. The question which we have to answer is whether sailors can be made, or if such manufacture can only result in the production of a poor substitute for the man born and bred to sea life.

The Naval profession demands rather more than shellbacks and gullible sailor's yarns. To-day, with the vast advancing development of ships and the appliances therein, education and technical knowledge are an integral essential of a mariner's make-up. This statement may be countered by the argument that India's merchant marine is largely manned by men of but poor educational standard, but so was the Royal Navy in the days of Nelson. Time marches on, and with it the demand for education in the sea profession as a whole is increasing, though as yet the fighting service has outstripped her sister the Merchant Marine in this respect.

Turning towards India, we find that education around the sea coast of the country, except in sea port towns, is, on the whole, poor to non-existent. Thus in the most likely recruiting field one of the essentials for a fighting sailor is absent.

That was the situation which faced the Royal Indian Navy as far back as 1927. In that year the Navy approached the Indian Army and with their consent inaugurated recruiting tours in the Punjab—the land of the five rivers and fighting men—which was the logical place to search for material to turn into sailors. In the early days, when the numbers to be recruited for the lower deck were small, there was little possibility of conflict between the Army and the Navy in meeting the respective demands. The Navy had now entered the bosom of the Army, and had commenced laying the foundations for the future which unless controlled might well at a later date lead to misunderstanding and jealousy.

The methods employed up till the end of 1940 were primitive, and consisted of tours made twice or thrice a year by a Naval Officer and a small party in the Murree Hills and the Salt Range, mainly with the object of recruiting boys for the slow but sound method of imbuing landsmen with the spirit of the sea. The process was successful in that the quality of sailor turned out was good, but the

quantity was totally inadequate to meet the needs of war. The experiment had, however, proved that sailors could be made, and that the field of supply need not be contiguous with the sea coast.

Late in 1937 it was decided to introduce direct recruitment of men, and a drive was made in the hope that the sea-faring communities might be able to supply these needs. The sad truth was soon laid bare in that whilst the quantity was adequate, the general quality was far below anything which could be usefully employed in a modern naval service. Several thousand Merchant Seamen, however, served in H. M. I. ships during the war and their practical seamanlike qualities were of great value in performing essential routine duties where this knowledge was required. Despite this knowledge no organised recruiting measures were introduced until the end of 1941, and during the early war years recruitment was carried out mainly in Bombay, though later a recruiting tour was organised travelling throughout the Punjab much in the same manner as a touring circus in the piping days of peace.

The recruiting parties carried on their piracy in the heart of the Army recruiting field, causing distress and despair to the military authorities. It was abundantly clear that with the expansion of the naval service ahead, unless a more organised method of recruitment was inaugurated, the Navy would be unable to meet its war time role of commitments. Accordingly, in the autumn of 1941, the Commander-in-Chief, Field Marshal (then General) Sir Claude Auchinleck stepped in with his comprehensive policy of an all-India recruiting organisation. It was one thing to propose and another to implement this measure, as neither the Navy nor the Indian Air Force had any personnel they could spare to undertake their share of the Inter-Services Recruiting work, and the whole burden of the task fell upon the shoulders of the Indian Army.

There have been many criticisms levelled at the Army recruiting organisation and its staff, but in fairness to them it must be remembered that they too were faced with vast expansion measures and a totally inadequate staff. In the midst of their troubles they were told to take on naval recruits as well, a subject concerning which they were naturally in total ignorance. This by some may have appeared to be the last straw on that camel's back, but he bore it remarkably well.

It has been said that ignorance is bliss, and such it was in so far that provision had been made on paper for the needs of the Navy, but recruitment alone could never produce the sailors to man the ships, as each and every man had to receive a type of training which was completely foreign to anything existing in India. Physical and educational standards had to be laid down without regard to those prevailing throughout the country if the requirements were to be met within the time limit, and a tooth comb search initiated to collect the likely men. Added to this, recruitment to the Services was voluntary, and the Navy was practically unknown over this vast sub-continent, so that the Inter-Services Recruiting Organisation set out under bad conditions to achieve a difficult task.

Before any practical results could be obtained it was necessary to devise a scheme of advertising to spread abroad the requirements for naval recruits and give a general line of intimation concerning service in ships of war, describing the duties to be performed by the various types of men employed. Not the least difficult of all was to explain how men of all castes and creeds lived and fed together aboard His Majesty's Indian ships without infringing on each others' religious scruples. This was a new doctrine and one but slowly accepted amongst the masses,

The Army recruiting organisation had all this to learn, besides having to be educated in the art of selection of personnel fitted for the different trades of the Service, as these varied considerably from anything existing in the Army. All this was done with the minimum number of naval personnel, and recruits started to roll in early in 1942.

Criticism has been rife to the effect that the Army and Air Force invariably took the cream of all the recruits, leaving but the dregs for the R. I. N. When Naval Officers, however, entered the field and tried their hand at the game they found that contrary to this popular notion the best were invariably offered to the Navy but that the trouble lay in the high physical and educational standards demanded by the sea service. Intelligence was often available in the raw state, but education amongst the masses was lacking.

The expansion of 2,000 per cent. in six years of war did not allow for recruiting to be fitted to the prevailing average standards, and in this a lesson was learnt that all expansion at any time must invariably be measured by two things:—

(a) The potential ability of the employer to provide training adequate to produce his needs, and (b) to devise such training to commence from the average standard which may be available in the open market.

If these two fundamentals are not adhered to recriminations levelled at any

recruiting organisation are inevitable.

The Navy has received more equitable terms at the hands of the Army recruiting authorities than could ever have been hoped for, and the results achieved have been equally surprising. The following figures may be of interest in respect to the development of the Naval Recruiting field between 1939 and 1945:—

(a) The strength of the Service was expanded from 1310 in 1939 to 27,763 at the peak period in 1945.

(b) The comparative class composition over the same period expressed in percentages shows a very marked increase in Hindus and a decline in Muslims:—

Caste		1939 %	.19 45 %
Hindu		9 <u>‡</u>	$42rac{1}{2}$
Muslims		75	35
Christian		13	$19\frac{1}{2}$
Sikhs		$\frac{1}{4}$	$1\frac{1}{2}$
Anglo-Indians		2	$1\frac{1}{4}$
Miscellaneous	••	$\frac{1}{2}$	$\frac{1}{4}$

(c) The expansion of the field of successful recruitment is best expressed in percentages of the Service strength at the beginning and end of the war:—

	1939	1945
Locality	%	%
Kashmir	$\frac{1}{2}$	11.
N. W. F. P.	$3\frac{1}{4}$	3
Punjab	$44\frac{3}{4}$	$21\frac{1}{4}$
Delhi	···	2
Sind		4
Rajputana & C. I.		31

U. P	3 1 38	$7\frac{1}{4}$	
Bombay		$8\frac{1}{4}$	
Madras	$4\frac{1}{4}$	$25\frac{1}{4}$	
Travancore	$\frac{1}{4}$	9	
Cochin			
Hyderabad }	$\frac{1}{4}$	$1\frac{1}{2}$	
Mysore			
Bihar and Orissa		13	
Bengal	1/3	$11\frac{1}{4}$	
Assam	$\frac{1}{4}$	1	
Others		3	
Goa and Portuguese India	$2\frac{1}{4}$	1	
			The state of the s

Though each individual Service may view with suspicion an integrated organisation to deal with their respective recruitment, it is clear that such a method is ultimately in the interest of manpower economy. It remains therefore for each Service to contribute to the Interv-Service organisation to enable such to function without fear or favour of any individual Service. If it has been shown that a soldier can recruit a sailor, sailors have been found to be equally good recruiters of soldiers, thus dispelling the ancient bogey of "every man for himself" and "all being fair in love and war so long as the object is achieved."

Recruiting in itself is a specialised subject and demands foresight and tact of all who engage in this type of work. It is essential to have a sound psychological knowledge of human nature, and to develop a wide understanding of the many peoples from whom recruits are drawn in this vast country.

There is no reason why a sailor should not prove as capable in the recruiting field as anybody else, provided that he is given adequate facilities and opportunities to travel throughout the country and mix with its inhabitants, great and small. The establishment of friendly connections amongst villagers and influential people is the essence of success, but it must not be forgotten that Local Government Officials like to receive due homage from itinerant scholars and peddling recruiters within their domain.

This subject has up to date been given but little thought in the Navy, as it has been deemed that a sailor's profession requires him to live and have his being upon the sea. Such a conception can only tend to make him into a form of marine animal, forgetful of his origin. Much greater care is necessary in the future to ensure that the link of land, sea and air is forged in ties of understanding and friendship, and the Navy will do well to remember the care and pains which her foster mother, the Indian Army, lavished upon her during her early years of expansion during the late war, and in fact, ever since 1927.

Training and recruitment must go hand in hand and bear a direct relationship to educational and physical development throughout the country, so as to ensure rapid and sound expansion, which will not cut across civilian enterprise, in time of emergency.

Whilst in recruiting we find the birth of Service personnel, in retirement from the Service we should not see the gloomy veil of death, but rather find that the Service training and education has provided for the development of civilisation and citizenship, so that the link forged by the recruiting organisation may not be broken when a man returns to civilian life. The Navy with her sister Services must remain the servant of her country, and the common aim should be the strengthening of the country's defences from within as well as from without.

In considering recruitment and the possibilities of obtaining suitable combatant personnel for the Naval Service, mention must be made of the Merchant Marine. The Merchant Navy is so linked with the fighting Services in time of war that the closer the ties established in peace the more easily can naval defence be developed in the event of hostilities.

From the foregoing it may be surmised that the combatant sailor is a snobbish edition of the merchant seamen, as each must possess the same spirit of the sea. The fact that technicalities and machinery of a complicated nature are as yet less frequently met with in merchant ships is the reason why the Navy calls for a higher standard of intelligence. The advances, however, in propelling machinery which have been made during the last few years are undoubtedly going to have a widespread effect on the technical personnel required to operate the machinery aboard merchant ships.

Here the Navy has set the lead in training in Marine Engineering, and a leaf can well be taken from her book if commercial shipowners are not to be faced with uneconomic running costs. The days of low-powered machinery of a simple type are fast disappearing as speed encroaches to determine who is to be the carrier of trade. As with the bullock cart which still finds its place in the plains of India, so with the obsolete slow steamship. Each is being relegated to a back seat, though each may still for a number of years to come continue to ply.

On deck at sea the position is not quite the same as in the engine room, for whilst intelligence and education are desirable in the interests of efficiency they are by no means as essential in the Merchant Marine as in the Navy. In time of war there are many naval duties which require a knowledge of seamanship without higher education, and it is these functions which can and should be performed by men from the Merchant Marine.

In addition to the Merchant Marine there are the fishermen, who should not be forgotten, though by virtue of their time-honoured methods they come in a lower category, and in these modern days are frequently lost sight of. Developments in the fishing industries will undoubtedly have their repercussions on the fisher folk of India. If the course of progress of the Western nations is followed and this splendid community can be enlightened educationally, a very solid background of hardy seamen will be available for local naval defence, thus leaving the deep sea work to the better trained men of the Merchant Marine and the Royal Indian Navy.

There is little doubt that with co-ordinated effort, all classes of seamen required for both trade and war at sea are available in India, and their effective use is dependent upon the development of training throughout the country. Much can be done during the years of peace which lie ahead towards the development of training for the sea with the co-ordinated support of the Merchant Shipping companies of this country.

Signals' Presentation to Princess Royal.

A 15th Century Japanese sword has been presented to the Princess Royal on behalf of the Royal Corps of Signals and the Indian Signals Corps of South East Asia Command. The Princess is Colonel-in-Chief of both Corps. The sword was taken by the 25th Division when they landed in Malaya after the Japanese surrender.—B.B.C.

A PLEA FOR ANIMALS IN INDIA

By L. CONWAY EVANS.

THE other day I was travelling in a railway carriage with companions of various creeds and professions. There was a very magnificent Brahmin priest and his attendant, a Mohammedan, a Hindu bania, a soi-disant Christian, an agnostic and a few others. There was also a young railway official who proclaimed himself a Seeker after Truth. It was he who started a discussion on the Nature of God which grew more and more animated and revealing as the train rolled on. I had no desire to enter the lists and sat quietly in my corner with eyes fixed on my book. Then came a station. Some of the debaters alighted and there was peace. But suddenly the young man broke out impetuously.

"I wish I were an animal."

At that remarkable statement I broke my silence. "Why?" I enquired. He was so surprised by the unexpected monosyllable that for a few seconds he could make no reply.

"What sort of animal would you like to be?" I continued.

"A bird. Then I should be free."

Then my hobby horse got the better of me and bolted. The tragedy of animal life in India is very close to my heart, and by "animals" I do not necessarily mean the exotic creatures which one automatically associates with the country, though these too are entitled to their share of compassion. I mean more especially the familiar beasts man has in subjection under him, to work for him and to serve him, and whose toil he repays as often as not with a neglect which is almost as grievous as actual cruelty.

I became almost surprised at my own vehemence on behalf of the proverbial underdog. My audience listened politely, and the young man took all I said in good part. He was a *very* nice young man, and when I paused for breath he said:

"There is a great deal of truth in what you say. Our peasants are very ignorant...."

But I cut him short. "I do not lay the blame so much on ignorance as on a lack of imagination. I also would not lay it at the door of the peasant exclusively, for that same lack pervades all classes and exists in all lands. Here however belief in the law of Karma does not tend to ameliorate the lot of an animal. If it suffers, then it deserves to suffer. I too believe in the law of Karma. As we sow, so we shall undoubtedly reap. That is self-evident. The great Buddha certainly believed in it and also in many re-births, but no one throughout the ages (except perhaps St. Francis), has ever taught compassion towards animals as he did."

Here I was on familiar ground, and I thought of the many calm-eyed Buddhas I knew in Chinese temples and of the many legends which tell of his love for all living creatures. These stories are well known in India, too, and are set forth in the Buddhist sculpture which still survives, and perhaps nowhere more beautifully than on the frescoed walls of the Caves of Ajanta, the scenes taken from the Jatakas. One of the most famous is that of the Weighing of the King's Flesh, a story which is well known but which bears constant repetition.

In one of his previous incarnations, the Buddha to be was an all-merciful King to whom none looked in vain for help. In order to test him, Agni disguised himself as a hawk and pursued a pigeon which, in its extremity, fluttered to the King for protection, and obtained it. The fierce bird of prey demanded his quarry, the saviour refused to relinquish it. But, recognizing the legitimate claim of the hawk, he offered the weight of the equivalent of the pigeon's body to be carved from his own. The sacrifice was accepted, and the King himself held the scales while his quivering flesh was laid upon them.

It is a beautiful allegory, and one wishes that some of that divine understanding with the terrified fluttering of a pigeon might be meted out to other homely and luckless birds, cocks and hens and all farmyard denizens. It is too often their fate to be carried upside down by their legs for miles or packed into crates, thrown around in trains and on the tops of buses, treated like inanimate objects.

Many owners of caged birds would be surprised and hurt if they were told they were being cruel. Do they not keep them because they are "fond of them"? Look at that dear little parakeet for instance.—and one looks, and sees one of these lovely garrulous and gregarious creatures, attendants on Parvati herself, jailed in solitary confinement in a diminutive iron cage. It provides the captive with no room in which to fly and in hot weather its metal floor, which retains the heat of the sun, converts it into a torture cell. So much for the loft of a "pet," and though perhaps fighting quails are not regarded in the same light they are sorry sights in their tiny prisons.

If birds are called upon to suffer, what of the fate of the higher creatures? Happy indeed is the lot of sacred monkeys who can scamper off into the tree tops and cock snooks at mankind, thanks to the exploits of their great ancestor Hanuman. But what of the still more sacred cows? They seldom scamper. Often heavy blocks of wood are attached to them to prevent any such frivolity, and frequently one cow is tied to the horns of another, and two wretched animals set off in uncomfortable partnership in the eternal quest of something to eat, no matter what, for even a scrap of paper does not seem to come amiss. I have seen them searching forlornly on cinder heaps and on piles of stones for a possible blade of grass, and have known them to accept avidly from my hands banana and tomato skins, strange fodder for cattle!

Presumably the wandering kine are happier than the draught animals. I have seen many superb oxen in India, but I have also seen them with terrible sores hidden under their yokes, and the other day it behoved me to make an expedition in an oxcart which revealed much of the technique of "driving." There were two beasts. One of them had had the lower part of its tail completely twisted off, but what remained provided a convenient handle for the Jehu to manipulate. He knew every weak spot in the animals' anatomy. He pinched their backbones, prodded them with a stick, kicked them in their stomachs from his seat of vantage, hurling abuse at them a while, and was very surprised at my unreasonable indignation and protests.

But, someone may say, an Indian cow is very privileged. It may never be killed. Here I am on thorny ground. But as Mr. Gandhi says, we all have to die sometime, and in some cases so much better sooner than later. I have seen and heard so many cows and oxen for which I have craved an instantaneous and merciful death. One particular cow comes to mind hobbling along on three legs, hopelessly handicapped in a struggle for a grim existence. I recall too the

tubercular cows to which I have listened in Kashmir, coughing, coughing, their lives no pleasure to themselves and a danger to all. Better a kindly death a thousand times than this pitiful martyrdom.

Overloaded tongas provide another disgrace. There are people who care not one jot nor tittle for the wretched four legged toast-racks in the shafts, and will pile into the conveyance mercilessly regardless of the total of avoirdupois. No strikes are possible for these poor brutes, no demands for baksheesh. They may consider themselves lucky if they are occasionally turned out to graze, but even then they are usually prevented from straying by damnable hobbles which allow them no relaxation of tired limbs and muscles.

Champions occasionally arise for horses, for they are valuable animals. Would there might be a crusade on behalf of donkeys, among the stoutest-hearted of God's creatures. Poor little grey Griseldas, patiently toiling over life's grim tracts, carrying, often on sore backs, such heavy loads that one can only see the twinkling legs and tiny hooves beneath, rewarded by kicks and blows. They are also the steeds of humble folk, of *dhobis*, potters, gypsies and other outcasts. But they are also the vehicle for a terrible deity, the Goddess of Smallpox, and in order to propitiate her, a bridegroom will sometimes mount an ass for an instant at his wedding.

Mohammedans say that when a donkey brays he sees the devil. Whether he does o does not, his capacity for braying is often denied him by the simple expedient of slitting his nostrils. Since I learned that, the once comic he-haw of nursery days, when it is to be heard, sounds to me one of the saddest of animal noises, a grotesque indictment of man's brutality. A donkey, an object of derision. Who cares? When I upbraided a bus driver for the blow his lorry had inflicted on one which had been slow in crossing the road, a blow which he made not the slightest effort to avert, his reply was: "A donkey. Oh yes. But I did not kill it." That was all that mattered.

Yet, as G. K. Chesterton has pointed out, the "Tattered Outlaw of the Earth" has his memories:

"Fools! For I also had my hour.

One far fierce hour and sweet

There was a shout about my ears

And palms before my feet."

and one remembers too that it was Borah who carried the Prophet upon his back from Jerusalem to Heaven and when Mohammedans look up into the skies and see the Milky Way they recall that the shining path was brought into being by his roughly shod hooves.

Fond as I am of donkeys there is no doubt that the most tragic of India's animals are the swarming pi-dogs, starving and diseased, unwanted and unloved, breeding, breeding with that terrible fertility which makes the problem so formidable and reform almost hopeless. Dogs. The only creatures in the world which have discarded the society of their own kindred for men whom they worship with pathetic idolatry often in return for callous indifference. Dogs. Dogs. They are to be seen everywhere, but some of the sorriest are those which foregather at railway stations in the hope of acquiring chance scraps of food. Their maimed and mutilated limbs bear witness to the accidents which frequently befall them.

One cannot blame peasant owners who have but too little to eat themselves for not feeding the dogs which belong to them. The tragedy is that they do own them and permit whole families of puppies to live if not to flourish, whereas an early and speedy death would be so much more merciful than the awful one which is a commonplace in Indian life during an epidemic of rabies, when a price is set on the head of a mad dog and the poor brute is pursued, clubbed and beaten till death stills its agony.

The greatest offenders, however, are the well-to-do people of all races who deliberately leave an old pet to fend for itself if circumstances demand a change of residence or country. Never shall I forget a spectre once encountered on the Bund in Srinagar, something which had once been a poodle. Hardly any hair remained on the mangy pink body, but a tuft tipped the once-clipped tail which he still had the courage to wag, and at that sight I could have wept.

I am not ashamed of being a sentimentalist about animals, but it is not an enviable role. To feel for them and with them, to be haunted by the piteous eyes of creatures in fear and in pain, to have a cry of anguish sounding in one's ears is not amusing. There are so many manifestations of carelessness and of thoughtless cruelty. I recall the sight of a little gazelle in a public park, limping piteously instead of bounding joyously, because its hooves in confinement had been left unpared and allowed to grow abnormally long. I think, too, of a tiger in a Royal Zoo imprisoned in a cage in which he could not even turn round, awaiting the day in which he would meet a boar in mortal combat. It is not so long ago that animal contests were regarded as "sport" in England, and much that is cruel still exists in my land. Our rabbit trapping is a blot on our civilization, and it is good to see how public opinion is being stirred up against it. For public opinion alone can change conditions and ameliorate the lot of animals. Amidst the rattle of politics what thought is given to their pain and suffering?

I have no venom to spill, no axe to grind. I have met most wonderful and humane vets in India. I know there are branches of the S.P.C.A. which do excellent work. But there is much, so much more to be done; so much more realization that animal suffering is akin to our own is necessary. Who shall say what benefits will accrue to mankind when all assume a more humane attitude to those who the great Saint of Europe, the Little Poor Man of Assisi, claimed as his Brothers and Sisters?

Plans for Services' Spots.

The Services Sports Control Board has arranged several important events throughout India for the 1946/47 season.

First of these fixtures takes place in New Delhi between November 20 and 23 with the semi-finals and finals of the All India Boys Boxing Tournament. This is followed by the Indian Army Football Tournament at Dehra Dun between December 11 and 16, the Individual Boxing Championship at Lahore between January 13-18 and the Inter-Services Squash Rackets Championship at the Indian Military Academy, Dehra Dun in the third week in January.

The semi-finals and finals of the Indian Hockey Tournament—the Colonel's Cup—will take place at Lahore between February 24 and March 8.

This season the Services Lawn Tennis Championship will be held at the Lahore Gymkhana Club between March 13—16. The Indian Army Team Boxing Championship will also take place at Lahore between March 17—22.

WHY NOT A RAILWAY TRANSPORTATION CORPS?

By "Bummelzug."

THE article entitled "Why Not a Railway Transportation Corps" gives a very able summary of the wartime transportation problem, and accords very much with the civilian viewpoint. It may be of interest therefore for a civilian to add a few comments on D.M.H.'s article to emphasise the points which he has brought out with particular reference to conditions in India.

An army, whether it is used in the defence of its own country or is occupying territory used as a base for a major amphibious operation, cannot be effective without an efficient civil transportation system. This is an essential part of the war machine, not only for the movement of troops and military stores, but also for the maintenance of the country concerned as a base of operations. As D.M.H. says, war conditions inevitably tend immediately to throw an increased strain upon the transport system. If therefore the system is to give adequate service to the military and the civil authorities, it will be necessary to strengthen and not weaken the civil agency. That being so, a conflict immediately arises, since the Army naturally wishes to draw on the civil agency for officers and men to expand its own transportation cadre, while the civil agency has to expand its own cadres and services.

Looking back at the course of events in India during the late war, there is little doubt that in allowing their staff to volunteer freely for military service, the Indian transport authorities greatly handicapped themselves in carrying out their own function, especially when the acutest strain fell upon India after reverses to British arms in Burma and Malaya. Railway officers require very considerable training before they become a real asset to the system, and dilution of the officer ranks as opposed to recruitment at the bottom is not possible, because trained men are not available. Even if they were, the situation is complicated by the fact that the railways in India are State-owned, and their servants come under State rules which have to be rigidly adhered to. When seeking to recover from the Army trained transportation officer who had volunteered for war service, it transpired that the Army had about one officer for every fifty men against the railway's one officer for 450. From the civil angle it was therefore imposing an unduly heavy burden on the remainder to have allowed any man to volunteer for the war at all, particularly as those who volunteered were naturally the younger and more virile men.

If this is accepted, and if in a future war volunteering for war service by transportation officers is not to be encouraged, then the problem for the Army which D.M.H. sets out gathers still greater importance. D.M.H. suggests that a Transportation Corps should be trained in peacetime on a Commonwealth basis and expanded in war; and that Supplementary Reserve companies should be formed in peacetime from transportation personnel who would be embodied in wartime and sent to the area where their services were most required. The danger of the latter lies in the fact that the Army authorities, who claim first priority in war, will tend to call up these S. R. Companies regardless of the requirements of the civil transport agency, and without due regard to the fact that the military machine cannot work efficiently unless the civil machine is at the highest state of efficiency.

If, of course, the country concerned is not itself in the vortex of the war, then this situation will not arise, but the experience of the last war showed that war to-day is worldwide, and it is impossible to forecast how and when the demand will fall upon the civil agency. It would appear therefore that the proper course is for the Army to train a self-contained body of Army transportation experts who will know how to make the best use of the civil machine, and who will form the nucleus of further expansion of military transportation units.

It has always struck the writer as remarkable that in the military histories of war, the bulk of attention is concentrated upon the operation of the troops, and the "Q" side of the campaign is practically neglected. There is less glamour about the latter, but of course without efficient "Q" operation behind the Army commander, any successful campaign is impossible. Modern war is more than ever a question of logistics, and the writer would be extremely interested to read an adequate and comprehensive account of the "Q" and transportation problems which faced and were mastered by the authorities in North Africa, France and Burma. It seems that a study of these and other campaigns should be an essential part of the training not only of a future Transportation Corps, but also of the training of the officer corps as a whole. Has not Field Marshal Lord Wavell quoted the saying "Transportation is war"?

As D.M.H. points out, and as we civilians found, the Army as a whole in this war had an amazingly poor understanding of the limitations of a transport system, and consequently of the best use that could be made of the resources available. To quote two instances only from the war in India, the jam which occurred at Manipur Road in 1942 would never have taken place if the Army authorities had had a little more peacetime training in transportation, and again in 1943 the British and American military authorities would not have got into such a flap about the capacity of the port of Calcutta if they had understood the elementary fact that you cannot for long put into a port more than you can take out of it; in other words unless you have the depots to which to clear imports of military stores with the necessary cranes and road transport, you cannot use the port to the best advantage. Many other similar instances occurred in the history of the war, and it is respectfully suggested that a wider training in transportation problems would have made the joint civil and military machine go more smoothly. When really experienced men took charge in the Army, things went like clockwork.

The Transportation Corps should not of course imagine that its function is to operate the means of transport within the base country. What it needs primarily is to know how to use the civil machine and what its capabilities are. It will then appreciate its difficulties, and be able to get the best out of it through combined team work, but the Transportation Corps cannot be expected to do this unless it is itself highly trained.

Its second function is to know how the transportation system can be expanded either by provision of more equipment or by the more intensive use of existing equipment. This is perhaps partly a question of peacetime technical exercises and planning. Did these ever exist in peacetime?

Its third function must be to provide military units, to provide reinforcements at the key points, to operate in danger areas where the undisciplined civilian may come under intensive bombing or other physical danger, and lastly to take over the operation of transport media in occupied territory.

It is clear from the above that D.M.H. is very much on the right lines in seeking to build up a thoroughly trained nucleus in peacetime capable of using the civil machine in wartime, and capable also of expanding on the basis of its own nucleus without much dependance on trained civil personnel for the purposes mentioned in the last paragraph. To achieve these objectives, it is clear that a far greater nucleus of trained men and officers is necessary than existed at the beginning of this war as a result of the limited training at Longmoor and the experience gained by a few R. E. officers trained on the Indian railways.

His suggestion is that a number of personnel of all ranks who have been given a thorough military training should be posted to civilian railways and ports, where they would spend their lives in a civilian capacity but always available for recall in war. Presumably they would be recalled in peacetime for short periods of military duty so as not to lose touch with military thought. This is good, but unless the civilian machine is to be weakened at a critical moment, the snag lies in the fact that just at the moment when they are most wanted on the railways they would be taken away.

It so happens, however, that in the opinion of many, the Indian railways are under-officered, and it may be that a solution in India lies in seconding for long periods Engineer officers to the Indian railways. This may be all the more necessary in view of the unattractive rates of pay current on the railways under the revised scales, although if the Army officers are to draw higher scales than the railwaymen, there is an immediate differentiation which is liable to affect their good relations with the civil staff.

The constitutional position is of course paramount. Will British officers be welcomed or not? It must be remembered that there has been no recruitment of European officers to the railways for many years, and there is not likely to be any in the future. Whether or not R. E. officers of the British Army would be welcomed for training on the Indian railways is a question which the new Government will have to decide. But the railwayman is always a railwayman, and it would be no less effective if Indian Army Engineer officers were trained on the Indian railways. It is clear that D.M.H. has raised a subject which required a lot of thought, and it is to be hoped that the authorities are giving it due attention.

As in the case of D.M.H.'s article, the above remarks apply particularly to railways, but are equally applicable *mutatis mutandis* to other branches of Transportation.

Forerunner of 1,700 m.p.h. Fighter Plane

With a casual wave of hand, Sir Ben Lockspeicer, pointed to a small model plane on a table at the Royal Aircraft Establishment at Farnborough, Hants, says the London *Evening News*. He said that he regarded the model as the forerunner of a fighter that would one day fly at 1700 m.p.h., more than twice the speed of sound. In such a plane Sir Ben envisages the pilot lying prone in a pressurised cockpit. There will be no undercarriage, the plane making "belly" landings.

Sir Ben, who has been engaged in aviation experiments since 1920 and is now Director-General of Scientific Research (Air) at the Supply Ministry, is quietly confident of its success, although "there are tremendous problems involved". Sir Ben suggested that jets were not the last word in propulsion and that British scientists were well on their way to evolving a newer and even more efficient power unit.

WHY ONLY A RAILWAY TRANSPORTATION CORPS?

BY LIEUT.-COLONEL R. B. EMERSON, C.I.E., O.B.E., R.E.*

THE article "Why not a Railway Transportation Corps?" by D.M.H. in the January 1946 issue of the Journal contains some constructive thinking which calls friendly criticism and, it is hoped, additional practical suggestions from one who has been concerned with the civil transportation system of India in Peace, and both Movements and Transportation in War.

The Supplementary Reserve idea is sound, because the civil administrations undertake to give up the men on mobilisation (they cannot join without the permission of the administration) and the men are trinaed transportation operators. Both sides, therefore, know their obligations. One criticism of the system is that the Supplementary Reserve Units were designed to work as Units, and not as the basis of a big expansion. Thus the individual Sapper was tained to do an individual Sapper's job, instead of being first taught that, and then how to do the job at least two steps higher up, i.e., that of the platoon or section 2nd I/C and I/C. The same applied to the higher ranks. Consequently when the Units had to be diluted to provide nuclei for still further new Units, they suffered from the feeling of leaving a good Unit whilst being insufficiently prepared to pull their weight in a new one.

The idea of permitting regular R. E. officers to enter civil employ with Indian Railways was also good in its conception, but it did not produce the results that it might have because once those officers had gone to civil employ, the Army took no further interest in them, and so, except for passing their promotion examinations (which they had to do just the same as any other Regular Officer), the Army lost touch with them and they lost touch with the development of Army methods and the trend of Army thought.

Thus when they were called back to the Army on the outbreak of war in 1939, they found themselves completely at sea regarding the then organisation of the Army, and also completely out of touch with modern developments and trends of thought. As a result, they were passengers for the first few months at a time when they ought to have been applying to the maximum what should have been their combined knowledge of civil transportation that they had learnt in the years of Peace and their military training. The Army did not know them or their capabilities, and they were struggling to catch up.

The writer does not accept the criticism of D.M.H. that senior Engineer Staff Officers are inclined to regard Movements and Transportation troops as being under their control. This did not occur in M.E.F. or C.M.F. Nor is Movements the only non-engineering branch of the Royal Engineers. The Army Postal Service and the Camouflage and Chemical Warfare sections are others. These criticisms, however, do not detract from his arguments in favour of a Transportation Corps.

The lack of appreciation of those arms of the Service, other than Movements and Transportation, as to the functions of the latter, and of the limitations of Railway, Road and Port capacity were, it is agreed, quite astounding, and it is most necessary that steps to eliminate this must be taken in the future, but the mere formation of a Transportation Corps will not do this of itself. There must be a far wider training of other arms in the basic principles of Transportation

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and the Staff Officers who are to man the Movements and Transportation Directorates in War must be fully trained in the functions of such Staff, their place in a formation Headquarters, and their proper relationship to other branches of the Staff in the Headquarters concerned. Similarly, Staff Officers of other branches of the Headquarters concerned must, in their Staff training, be given a better understanding of the duties and limitations of Movements and Transportation Units and of the methods by which the Transportation system of a theatre of War can be used to the maximum advantage.

D. M. H's proposal for a future Transportation Corps, with S. R. Units and Regular Officers and other ranks attached to civil railways, is basically sound, but why restrict it to Railways only? Docks and I.W.T. Units were an essential part of Transportation Troops, both in the last War and the one before, and it would be more logical to call it a Transportation Corps. His proposal needs adding to it the proviso that those regular personnel attached to civil administrations must be returned to the Army, at intervals not exceeding two years, for short periods to keep abreast of modern developments in the Service. They should be attached to Units or Staffs for the annual Brigade training period, when junior, and to the higher formations when more senior.

It is difficult to accept the theory that the outbreak of war would not necessitate the calling up of the whole of these S. R. troops and regular personnel. The experience of the last War seems to indicate that any future War would, on its outbreak, necessitate the calling up of all such Units and personnel in the Empire to accompany the ground forces on whatever fronts they were called upon to fight. Thus every part of the Empire would feel the void, and the part which had the heaviest load would feel it most. It is true that dilution can take place in all walks of life, and it did so in the civil railways of the Empire last time—in England by the retention of over-age personnel and the employment of 100,000 women, and in India by stopping leave ex-India and thus absorbing the leave reserve into the working cadre, the retention of over-age personnel, and the engagement of extra staff, who were completely raw, had to be trained, and were only temporary hands.

The solution to the formation of a Transportation Corps of adequate size in peacetime seems to lie in the division of the total strength required over the Empire by S. R. Units formed from civil ports and railways, as well as the retention in civil transportation organisations of a cadre of militarily trained personnel of all ranks who would be earmarked for recall on the outbreak of War. In order that the mobilisation of the Regular Army cadre should not unduly upset the civil transportation system of the Empire, the total overall peacetime strength would need to be slightly bigger than it would be in other circumstances, this extra strength being paid for by War Department funds. Rates of pay and conditions of service are a snag, but could perhaps be worked out so that each part of the Empire paid its Regular Army cadre on scales comparable to those of the civil transportation system of that part. Whether those scales would need adjustment on mobilisation is a problem which only a comparison of the Army scales with the civil transportation scales of each part of the Empire could decide.

The military training of the S. R. Units and of the Regular cadre would need to be organised on a common basis throughout the Empire, so that Units from different parts of the Empire could talk the same language when they found themselves working in the same formation.

It is to be hoped that the foregoing may help to stimulate thought on a problem which caused many of us a great many headaches in the last War.

MILITARY GEOLOGY AND WHAT IT MEANS

By E. J. Bradshaw.*

IN WAR the geologist has two principal functions. First, to search for and advise on the exploitation of deposits of mineral substances essential for the production of munitions and the maintenance of industry and communications; secondly, to provide geological information and advice relating directly to the military operations and to the maintenance of armed forces in the field.

In short, the military geologist is concerned with the surface materials useful to the soldier, and with the surface conditions that affect his maintenance, movements and operations. He is largely concerned with the dusty or muddy alluvial deposits on which man lives and grows his crops—and on which soldiers prefer to fight their battles and to site their airfields. Unfortunately, speaking generally, it is about alluvium that the geologist knows least. That is because he finds little scope in wielding his little hammer in the wide open spaces, and therefore tends to focus his attention on rocky outcrops, which form the backbones of the hills and produce the other obstacles so disliked by soldiers.

Let us, then, see what help he can give to the soldier, and what should be done to make sure that in the next war full advantage can be taken of the potential usefulness of military geology. Firstly, there is the practical help he can give to the engineer in planning and carrying out specific projects, whether to the rear or in the front line; he can also help the engineer in the matter of water, whether to make good, or to guard against, its ravages, to dispose of unwanted accumulations, or, more commonly, to find water for drinking. It is the function of the geologist to indicate the resources available, and that of the engineer to develop a supply therefrom.

It is essential that the geologist be brought on the scene early. On occasion he has been summoned to a dismal, desolate spot on which there is a notice board: "No....Transit Camp", and confronted with the request: "Will the geologist please unpack his hazel twig and set to work; for the camp will be opening on Monday week". Well, we will assume that the geologist does his stuff and locates a useful supply a quarter of a mile away. Will that do? Hegets the answer: "No, it will not. I'm afraid we haven't got any pipe, and even if we had we'd need a pump, and in S.E.A. pumps don't grow on trees". Another popular greeting is: "We've laid out everything very carefully, and we've got the cookhouse and the ablution sheds all nicely grouped together, and it's right here that you must find water". That is not a very embroidered account of an actual occurrence.

My point is: The proper time to call in a geologist is when you are planning a project. If that is done you may be able to put the cookhouse where you won't need a mile of pipe. Remember that the availability of a nice flat vacant site—just the place for a transit camp—is very commonly attributable to the failure of the local villagers to find water there.

Similarly with roads. If a geologist is consulted early, he may be able to suggest changes in alignment that, by avoiding unstable areas, may prevent all sorts of troubles later, and may save a great deal of money and much time. He

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will, of course, also advise on the suitability and availability of stone for construction and maintenance. Thus all road alignments should be vetted by geologists before work is begun.

There are many cases where the geologist cannot give much help. If you are making a road from India into Burma you cannot avoid a number of unstable areas in which landslides are bound to occur, but even then the geologist may be able to suggest which of alternative alignments is likely to give the least trouble, and he can suggest how best to cope with the landslides that are inevitable. One of the odder jobs the military geologist has to face is to advise the R.A.F. on how and where a few well-placed bombs might plug tunnels or start landslides that would give a big headache to the enemy engineers who have lines of communication to keep open.

Air Forces must have airfields, and the geologist can help concerning the stone and water supplies necessary for them; but his most important function should be to advise on the probable behaviour of the ground and, for planning purposes, to produce maps indicating relative suitability on a regional basis. Certain authorities in S.E.A.C. were good enough to say they found geologists useful in their general surveys of airfield sites, and they, and certain Divisions in S.A.C.S.E.A. were the biggest customers of the small staff of military geologists whose work I had the honour of directing.

We were consulted by all sorts of people about all sorts of projects—from making bricks, or finding materials suitable for plastic armour for protecting ships, to damming rivers or vetting inaccessible sites for Bailey bridges in Malaya and on the Stilwell Road. The Bailey Bridge over the Shwell River in Burma is a good example of the help that geologists can sometimes give. When the bridge was planned, the site was deep in enemy territory, and could not very easily be visited. But we were able to obtain information that enabled us to warn the bridge engineers that, for geological reasons, they might expect trouble on the far side. They therefore modified the design of the bridge and, when the time came, they took special equipment with them and were thus able to deal expeditiously with the expected slipping hillside, for which they might otherwise have come unprepared.

We also had a great variety of minor side-lines. For instance, geologists can advise on the detection of landmines, for if the stone used for metalling a road contains much of a mineral called magnetite, then magnetic mine detectors will not do their job. The geologist can consult his maps, and foresee that in some particular region the roads are very likely to be paved with this sort of rock, and this makes it possible for suitable precautions to be taken beforehand. Magnetite can cause other troubles; in certain parts of the Italian theatre it caused serious interference with radio signals and the like. There was always the resultant brisk demand for maps showing where this treacherous mineral was likely to cause trouble.

Another odd side-line was concerned with tin dredgers. Tenasserim and Malaya are tin-producing regions. Much of the tin is obtained by dredging gravels that are interbedded with sand and other fine deposits. It was suggested that the tailings from the dredgers might provide the engineer with neatly sorted heaps of useful materials, but when they asked us we were able to show that while one type of dredger did do its duty in a useful way, the other one buried the gravel beneath the fine tailings— and so it was possible to ask the London offices of the manufacturers in good time as to which type of dredger had been used in the places which were of interest.

A geologist is, or should be, a handy man to have about when an operation is being planned, because he possesses exceptional professional qualifications for the appreciation of terrain, which he shares with the geographer. Planning an operation is not unlike a round of golf. You can get round the course with one club, but your score would probably be better if you had a bagful. The military geologist should always be in the Planner's bag. He is in the niblick class; at some holes he may not be needed at all, but generally the player is certain to use several clubs, and the Planner should have them all with him. It is an advantage for him to have a well-matched set of irons.

So with Operational Planning. All kinds of specialists are needed. Unfortunately, the "geologist-niblick" isn't as yet as effective a club as he might become if, during peacetime, continued attention were paid to improving the design of this essential club, and if it were more widely realised that a good club costs money.

Here is an instance of the present limitations of military geology. During the recent war there were persistent calls on the military geologist for soil maps. These are useful for siting airfields and other works, but their greatest value lies in their indication of the "going"—a consideration of importance in planning and in conduct of operations.

It is thus essential that these soil maps should be trustworthy. Inaccurate soil maps might be most dangerously misleading; and reliance upon them might have disastrous consequences. For this reason, though the military geologist can prepare generalised maps that may, with caution, be used for strategic purposes, he can furnish soil maps for tactical purposes only in respect of the comparatively few areas outside Europe and America for which detailed information is available to him.

Thus it is essential to perfect methods for the direct recognition of soil types in air photographs, and herein lies one of the most promising fields for the future development of military geology. It would obviously be of the first military importance if a team that included geologists could identify the soil types present by direct interpretation of air photos (supplemented by ancillary methods of observation such as test bombing), and thereby predict, with certainty, the nature of the "going" under all weather conditions. The first step would be for the military geologists to devise a utilitarian classification of soils into easily identifiable types based on their military charateristics, and then for the team to perfect a technique for recognising these types in air photos. Great improvement is possible, and it would be more than a pity if adequate provisions were not made during peace to carry out this work.

"Trafficability"—a hideous word—is not quite the same thing as the "going". The "going" is a convenient collective term to connote all those physical attributes of terrain that affect military movements. "Trafficability" refers to the ability of individual parts of the surface to support military traffic. There is little need to stress its vital military importance, and the geologist ought to know very much more about it than he does. During peacetime he must study the military characteristics of mud and of sand, and somebody must see that this is done. Years ago motorists used to be preceded by a red flag; while the revival of that obligation might make our roads safer, it seems less desirable that the only real way of ensuring that a tank will not be bogged is to have it preceded in battle by an armoured footman whose precarious task it is to test the ground by prodding it with some spring gadget in a complicated sort of shooting stick.

It isn't good enough. Nor is it excusable that a host of military vehicles should ever again bog themselves on some future Morib Beach. It is not always possible to arrange for Maquis to dig for bait on enemy beaches, or for cloak and dagger boys to make hazardous sorties on furtive sampling missions from which they used to return (if they were lucky) with samples of beach sand wrapped in very curious containers. We want something better than that. We want an improvement in our ability to spot what might prove to be most murderous traps, and military geologists must be put to work on devising sure methods of recognising treacherous ground in inaccessible locations.

One job we tackled—rather late in the day, I'm afraid—was to analyse the whole of the vast coastline of the South East Asia Command, and break it up into about a dozen representative types, such as Open Sea Delta, Cliff and Cove, Sandspit and Lagoon, and so on. There was a double object; first, to facilitate operational planning by thus classifying any given length of enemy coast; and secondly, to enable operational training to be carried out in places known to resemble the target coast. This sort of thing was done in a big way in Europe, and geologists there has a good deal of say in matching beaches that were to be landed on, and rivers that were to be crossed.

One other subject I want to refer to—Photo-Geology. It is a specialised sort of photo-interpretation. It involves the construction of geological maps based on a study of air photographs. The normal procedure involves a good deal of ground check work, and successful application of the technique depends partly on the adequacy of this and partly on the regional geological structure.

It may be remembered that a combined operation was planned for landing a considerable force on Puket Island, off the Siamese coast. A geological map was badly needed during the planning of the operation. However, no such information was available about Puket, though we knew that in a general way its geology was likely to resemble that of Tennasserim, about which we did know something. So we did rather a rash thing—we undertook to produce a complete geological map of the island, based only on air photographs; and this map included a good deal of beach information.

In compiling the latter we had a difference of opinion between ourselves and the "Pic" interpreters. On one of the more important beaches were certain dark patches, which the "Pic" people believed to be rock outcrops; my people thought they were wet patches. Now that was an important matter, for if geologists cannot recognise rock when they see it in a photograph, then something must be done to improve photo-geology. Alternatively, if the professional photointerpreters can't tell the difference between rocks and wet patches on a beach, then something must be done about photo-interpretation.

In planning a landing on a beach it seems reasonable to expect the geologist to say whether there are rocks about, and how jagged they are likely to be. Ordinary rocks are "pieces of cake", but there is an odd material called "Beach Rock", which is a kind of natural concrete, probably formed by the cementing together of the beach materials by calcareous matter precipated from fresh ground water seeping into the sea. This material occurs more or less capriciously, and it is very prevalent in the area covered by S.E.A.C.; but we know very little about it. One serious snag is that it is often only exposed at extreme low tide, and, unless there is sea-weed growing on it, you are quite likely not to spot it on air photos, and it is just the thing for ripping out the bottoms of landing craft. Here, then, is another problem for the military geologist to study in peacetime.

Another problem concerns the question of water on beaches. Fresh water is lighter than salt, and if you dig a hole in the sand dunes above a beach, you are likely to find a thin layer of fresh water, like cream on milk, resting above the salt water in the deeper sands. If you dig your hole too deep—more than a few feet—you will run into salt water, so what is wanted is wide and shallow excavations, like ponds. Here again geologists don't know enough about what yield you are likely to obtain; or, indeed, in what circumstances you can count on a sure supply from a source of this kind, or from the fresh water springs that very commonly seep out above high-water level on beaches.

I hope that serious attention will be given in the post-war planning period to the vital necessity of employing skilled geologists, who could devote their whole time to the problems I have mentioned and to others to which I have not referred. But I rather gather that while it is proposed to employ more geologists than was originally intended, these geologists will be split up between various branches, and that there will be no separate geological section devoting its whole time to the development of military geology as an applied science.

If that is so, it is a thousand pities, for though these geologists will do useful work in compiling geological information on a regional basis—useful because the effectiveness of the help a military geologist can give depends largely on the completeness and accuracy of the regional geological information available to him—the other matter is much more important—that is, the effectiveness of the military geologist in being competent to apply that information to military needs. It is not an adequate solution to farm out research problems to civil organisations on a part-time basis.

If continuous attention is not paid during peacetime to the development of Military Geology by an adequate whole-time staff of first-rate geologists working under experienced direction, we are likely once again to be caught unprepared. Military geologists are useful, but their usefulness is largely potential; the military geologist, to revert to my sporting simile, ought to be a niblick, but is to-day only a rather light mashie.

To what extent was this "club" wielded during the war? In the European theatre the Germans employed over two hundred military geologists. What did we do? From 1939 to 1943 the Chief Engineer, B.E.F. had one. In November, 1943, a geological section of two officers was established in the Inter-Service Topographical Department at Oxford; by the end of the war its establishment had increased to eleven officers, chiefly employed on the compilation of regional information; they did not give direct practical advice in the field.

In Africa, and later in Italy, useful field work—mainly on water resources was done by the 42nd Geological Section of the South African Engineer Corps, which was an independent technical unit that made considerable use of geophysical methods for locating water. A handful of geologists was attached as individual advisers at certain headquarters; and civilian organisations were frequently consulted about technical matters.

Out here we did relatively better—but not much. I had a staff of ten geologists graded as G.S.Os, who besides compiling and publishing geological information for military purposes, were available for practical work in the field. But it wasn't nearly enough. It was, I fear, the old story of "Too Little, Too Late", and it must not happen again. We must have our schemes and organisations ready, for next time we can be sure that the show will start with a bang. We shall not have the customary year or two of grace.

Finally, it is of no use having military geologists if the Armed Forces do not know of their capabilities and limitations. It is no good their giving advice if they do not make sure that their advice is intelligible and relevant.

Military geology must be popularised. There must be courses for staff officers and for engineers. The object should not be to teach geology; in the case of engineers the object must be to teach them how to recognise when there is a geological problem, not how to solve it; and in the case of staff officers the object would be to demonstrate the uses and limitations of the "niblick." These things must be set out in reference books that must be free from jargon, and which must be very widely distributed.

But all this requires personnel—and personnel costs money. There's the real rub, and a cautious approach is advisable, for when you open your mouth wide you must be careful not to put your foot in it. Military geology is still in its infancy, but like all infants who do not wish to die of starvation, it must squawk and holler and make a general nuisance of itself until it is given nourishing food.

Large-Scale Destruction of Jap Munitions

About 10,000 tons of Japanese bombs, shells of all calibres, mines, rockets and torpedoes have been destroyed by the troops of the British Commonwealth Occupation Force, during the last few weeks. Vast quantities of these stores have been dumped into the sea, destroyed by burning or detonated on site.

It is estimated that there are more than 250,000 tons of munitions still in the B.C.O.F. Area, in various dumps and magazines. One interesting dump, just uncovered, contained over 500 torpedoes complete with warheads and gyroscopes.

Many of the small islands which dot the Inland Sea around Kure and Hiroshima are pitted with caves filled with materials of war of every known variety. The rate of disposal is governed by the rate at which the Japanese can supply boats, motor vehicles and labour for the task.

Much of the recovered equipment is being used by such branches of the occupation forces as the Engineers and Ordnance services. Only stores not required by the occupation force are being returned to the Japanese Government for use in the rehabilitation of the country.

More Milk for Indian Troops

As a result of a revolutionary new milk blending process which is shortly to be introduced into the Indian Army by the Military Farms Department, the milk ration of the Sepoy is going to be increased by 50 per cent. This process will also effect an annual saving of Rs. 20 lakhs.

The process consists of reconstituting imported evaporated milk powder with pure water and mixing it with a proportion of buffalo milk, which has a high fat content. The result gives a fresh milk which is indistinguishable from ordinary cow's milk and is equally rich in proteins and vitamins.

The new milk will entirely replace standard milk. Its introduction will enable Military Dairy Farms to reduce the size of their herds, a factor which will lead to a corresponding reduction in fodder requirements.

OPENING AND DEVELOPING A CAPTURED PORT

BY LIEUT.-COLONEL G.L.W. ARMSTRONG.

OPENING and developing a captured port is one of the more difficult administrative problems to be faced in war, and there is unfortunately very little written material which can be studied for use in the future. The writer recently had the good fortune to be able to study the opening and development of a recaptured port in an Eastern theatre, and it is hoped that the notes which follow may be of use to others. Throughout the paper operational aspects have been ignored, and only the administrative problems have been considered.

The article is based on operations in the Far East against a well-armed and well-trained enemy. It is assumed that during our initial reverses, when we had to evacuate the territory two years earlier, the port was damaged to a certain extent, although it had been used since then by the enemy. It had also been bombed by the Royal Air Force during the enemy occupation, but the full extent of the damage to the port at present is not known.

The decision to recapture the port is a matter of major strategy, and is the responsibility of the Inter-Service Supreme Commander. Having taken the decision that the recapture of the port and its development as an Advanced Base is necessary for future operations, the Supreme Commander instructs his staff to prepare a Directive to the Naval, Land and Air Commanders-in-Chief.

This Directive must contain information regarding the size of the Naval, Air and Ground forces to be based on the port and, in particular, the Commander-in-Chief must be told what commitment there will be for the construction of air-fields in the area. The Directive must lay down clearly the size of the reserves (including P.O.L.) which are to be held in base, the dates by which completion of the various stages of development are to be attained, the target tonnage capacity of the port, and the phases by which this target is to be reached, the numbers of personnel likely to pass through the port in each direction, and the geographical limits of the Advanced Base.

It should also contain guides for the Army Commander, on the Civil Affairs commitment, whether there is likely to be an export commitment in respect of rice, rubber or other commodities produced in the country, which are urgently required in the prosecution of the war, the size of the workshops which are to be set up within the Advanced Base, major policy regarding accommodation (e.g., whether troops are to be accommodated in tents, huts or local buildings) and full details of any accommodation requirements which may exist for Supreme Headquarters or its units within the Advanced Base.

It must be clearly laid down which Service is to be responsible for the coordination of plans and the date by which the Inter-Service Joint First Key Plan is to be ready for the approval of the Supreme Commander. The Supreme Commander's Directive must also lay down clearly the general policy regarding priorities, in order that problems may, as far as possible, be settled on the spot.

It is essential that the data included in this Directive be accurate and that the Directive be capable of fulfilment. Once planning has started, great delay and confusion will be caused if changes are made in the Directive issued by the Supreme Commander. In particular, Intelligence must be checked carefully, as an inaccurate Intelligence Appreciation may well cause the plan to be unrealistic.

On receipt of the Supreme Commander's Directive each Commander-in-Chief appoints a Base Commander and prepares a Directive for him embodying the requirements laid down by the Supreme Commander, together with such further requirements as he may have on behalf of his own Service. The Directives issued by Commanders-in-Chief will deal primarily with the problems of the Service in question, and will expand on the requirements laid down by the Supreme Commander.

Amongst other points, Commanders-in-Chief must ensure that the Base Commanders are given full information of accommodation requirements for Head-quarters and units under the control of Commanders-in-Chief which are to be located within the Advanced Base; they must inform the Base Commanders of the actual tonnages to be held in each of the depots in their area, and must provide them with detailed Intelligence Summaries.

It is essential also that it be laid down at this stage which of the three Base Commanders is to be Chairman of the Port Executive Committee; during the initial stages when the problems of opening the port are primarily of a Naval nature it will probably be advisable for the Naval Base Commander to act as Chairman, but once the port is open and running smoothly, Army considerations become paramount, and it is often desirable for the Army Base Commander to take over the Chairmanship at this stage.

It is most desirable that the Headquarters of the Naval, Army and Air Base Commanders be fully mobilised before they undertake planning, as it is almost impossible to produce a workable plan unless the full staff is present, and has shaken down. If possible, the key officers of the Base Commander's staff must have had previous experience in the working of a port and Advanced Base, and the Port Commandant should have had both Movements and Staff training. All three Base Commanders and their staffs must be located together during the planning stage, both for office and living accommodation. (It is astonishing how many problems are settled quickly over a glass of gin, which take hours to sort out over a conference table). Right from the start planning must be a joint effort by all three Services and any tendency to work in water-tight compartments must be avoided. The three Base Commanders must agree on a planning programme, and daily co-ordinating conferences must be held at which the plans of all three Services are tied together stage by stage as planning proceeds.

They must be absolutely clear regarding what units and stores are their responsibility for introduction into the port, and they must place bids for their tonnage requirements on their Commanders-in-Chief.

In preparing their plan for the reconstruction of the port and for the use of such facilities as remain, the Base Commanders must work on the worst case, taking account of no assets which they are not absolutely certain will be found on arrival. Similarly, priorities for the flow-in of men, vehicles, equipment, stores and Units must be based on this case. Once a reconnaissance has been made after arrival in the port, plans can be modified to take account of such assets as are actually available.

Particular points which the Base Commanders must watch include the Works Priority List, which must be detailed and include all known commitments for the three Services; the inclusion in the Works Programme of extra commitments at the last minute after arrival in the port may well have a serious effect on the development of the base. The sketch attached to the First Key Plan must be agreed by all three Base Commanders and show the complete layout of all Headquarters, units, depots and installations within the Advanced Base.

It is essential also that the Berthing Plan of the port and the allocation of docks be agreed by all three Base Commanders. On the completion of their plan, the Base Commanders must put up to their Commanders-in-Chief a joint statement of requirements and must be absolutely clear regarding the effect on the development of the Base if the resources shown are not provided.

It is most important also that a flexible and clear plan be prepared for the introduction of reconnaissance parties into the port immediately on its capture. Such parties must be accompanied by adequate transport or their value will be enormously reduced. Alternative plans must also be made for the introduction of these parties in case the original plans prove impracticable at the last minute.

Other points to be included in the Joint First Key Plan include a convoy programme for the phasing in of personnel and stores for the development of the Advanced Base, arrangements for the salvage of resources found on arrival in the port, and arrangements for the provision of navigational aids in the port and for its survey. Steps must also be taken to ensure that sufficient pilots will be available to work the port. If sufficient alongside berths are not available, large numbers of landing craft may also be required in order to maintain target tonnages through the port.

As regards communications, it is not only essential that signal communications ashore be efficient, but it is equally important for an efficient signals system to be provided within the port, so that there may be no delay in handling ships on their arrival. In addition, adequate arrangements must be made for the movement of pilots to and from within the port; this particularly applies in cases where there is a considerable distance between the entrance to the harbour and the

dock area.

The Civil Affairs organisation must be clearly laid down, and steps must be taken to prevent disease and unrest among the civil population. Foodstuffs will have to be imported and controlled to prevent starvation, and the Army Base Commander will find his Civil Affairs responsibilities filling a large proportion of his time.

The First Key Plan must take full account of local resources of civilian labour and must make a practicable plan for its enrolment, control and allocation. Similarly, the control and allocation of transport must be worked out beforehand and laid down in the plan.

In order that there may be no delay or confusion in the operation of the port immediately on its capture, the constitution and responsibilities of the various port authorities must be laid down in the plan. Three committees will be re-

quired :-

(a) The Port Executive Committee, consisting of the three Base Commanders, the Port Commandant and such other officers as may be required from time to time. This Committee is responsible for settling all major points which may arise regarding the working of the port and for laying down policy. The capacity of the port depends on the rates at which stores etc., can be handled at all stages, i.e., unloading of ships, transport by lighter to docks (unless ships are berthed alongside), transport from docks to depots, and reception in depots. If any of these links are unable to keep up the rate of handling of the remainder, bottlenecks will occur, and the capacity of the port as a whole will be reduced to that of the weakest link. It is the task of the P.E.C. to maintain continual watch on all the cogs of the machine, and ensure that bottlenecks do not occur.

(b) The Port Working Committee. This Committee consists of representatives of all three Services, and is responsible for dealing with all day-to-day matters regarding the operation of the port. It meets daily and refers to the Port Executive Committee matters of a policy nature which it is unable to settle itself.

(c) The Port Defence Committee. This deals with all aspects of port defence, including security, anti-aircraft, fire and ground defence problems. This also is an inter-Service Committee consisting of representatives of the Navy, Army and Air Force.

The First Key Plan must contain one joint inter-Service priority list for the introduction of units, personnel and M. T. into the port. There must invariably be a good deal of last-minute juggling in order to make the best use of shipping, and it is only possible to obtain units etc., in the right order if such a priority list has been prepared in advance. Care must be taken to ensure that engineer, ordnance, supply, signal and R.A.F. Port Detachments are phased in with the earliest convoy, as without them chaos will result in the dock area.

Adequate police are also required in the earliest stages after the capture of the port for the control of traffic, in order that the small amount of transport which is available may be used to the best advantage. They will also be responsible for the prevention of looting. Care must be taken to ensure that adequate transport is phased in to deal with the tonnages arriving in the port, and both Docks Companies and Dock Construction Companies will be required in the first convoy.

It is important that too great a reliance should not be placed on civilian labour, especially in the early stages, and it is most desirable, if possible, that a nucleus of Pioneers be included in the early convoys. It must also be remembered that if signals units and their equipment are not phased in early, the result will be poor communications, with consequent confusion and delay in the working and development of the port.

The Joint First Key Plan as finally agreed between the three Base Commanders and approved by Commanders-in-Chief and the Supreme Commander will cater for the majority of problems which are likely to arise after the capture of the port. No matter how carefully this plan has been prepared, however, hundreds of matters will arise from day to day which have not been foreseen, and on which decisions will have to be taken by the Base Commanders. It is essential that after their arrival in the port the Naval, Army and Air Base Commanders maintain the close liaison and co-operation which has existed during planning, and no arbitrary decisions must be taken by any Base Commander without due consideration being paid to the interests of the other Services.

The first task of the Base Commanders after the recapture of the port will be to carry out a complete reconnaissance of the area, and as a result of this reconnaissance such amendments as are necessary will be made to the First Key Plan to bring it into line with the situation as it exists on the spot. These amendments must be confirmed by Commanders-in-Chief, and, after approval, the amended First Key Plan is renamed the Second Key Plan. Thereafter it is most undesirable for any alterations to be made to the Second Key Plan.

As far as possible, Depot Commanders should be included in the first reconnaissance parties, in order to give technical advice on the siting and location of their depots.

One of the earliest tasks on arrival in the port will be the clearance of enemy ammunition, mines etc., and this must be tackled on an inter-Service basis. Traffic signs must be set up so that there may be no delay in the turn-round between docks, depots, etc., and it is essential that standard symbols be used throughout to denote the various Services and depots, as in an Eastern theatre, the problem of drivers unable to speak English has to be catered for. It is undesirable for local symbols to be adopted for traffic signs, as this causes confusion when drivers, etc. arrive in the Base from other areas where different symbols may have been in use.

Base Commanders must ensure that they keep their superior commanders fully

informed of the situation on the spot.

During the early stages after arrival in the port, the engineer staff will be severely burdened with planning a works programme and putting it into effect, and it is desirable if possible that it be strengthened during this initial stage if work is to go ahead at maximum speed.

The ideal method of recruiting civil labour is through Civil Labour Control Teams, but if these are not available or are insufficient, it may be necessary to obtain civil labour through local contractors although this usually operates to the detriment of the labourer himself. Adequate provision must be made for issuing tools to civilian artisans employed on arrival in the port, especially after an enemy occupation. Standard rates must also be laid down by all three Services for payment of labour, piecework, etc., and no "cheating" by individual units etc., must be permitted.

Once units have arrived and started work it is most undesirable that they should be called upon to move to another location, as this causes a disproportionate delay in the development of the base, especially in the case of depots which are trying to build up to target stock holdings. The problem of providing guards will be difficult, and local resources will have to be used to the maximum possible extent as it is seldom possible to earmark more than a few troops purely for guard duties. It must be accepted that the use of depot staffs, etc., on guard duties detracts from their working efficiency.

It is absolutely vital to avoid congestion in the dock area, and stores

must be cleared to depots immediately they are discharged from ships.

Although visits to the port by Commanders and staff officers of Higher Formations are often of the greatest value, they should not become too frequent or they may interfere with smooth working, especially when, as sometimes happens, officers neglect to inform the Base Commander of their presence. Such visitors should invariably be accompanied during their visit by a representative of the appropriate Base Commander, and should discuss with him points they have noted before reporting to their own headquarters.

It should be clearly laid down for all three Services in the Base who is to be responsible for the provision of furniture, and no individual requisitioning of furniture should be permitted, except by the authority so designated. It is usually better for the Army to be made responsible for the provision of furniture

through Ordnance or Engineer channels.

All concerned must understand that all local resources found on arrival in the port are subject to allocation by the Port Executive Committee, and Services must not be allowed to appropriate for their own use resources not allocated to them.

The main point which cannot be overstressed in this problem of the opening and development of a port is the necessity for complete and continual inter-Service co-ordination at all levels. The work of the three Services is so intermixed under present day conditions that there is hardly a single aspect of port working in which two or more Services are not concerned. If the three Services do not maintain the closest possible liaison, arbitrary decisions will be taken, confusion will be caused, the development of the Base will be retarded, and the success of future operations may well be prejudiced.

The success of the operation will hang on the co-operation which is achieved during the initial planning stage after the assembly of the Base Commanders, and they must make every effort to foresee and cater for every possible problem

which is likely to arise after the capture of the port.

PLANNING AND THE SMALL STORES

BY LIEUT.-COLONEL GEOFFREY NOAKES.

WHITE tents, white vests, khaki shorts in green jungles! Throughout the war, there has been a noticeable lack of forward planning in the production of clothing and small and apparently insignificant stores. This article does not refer to the co-ordinated appreciations by the General Staff in conjunction with the Technical, Ordnance and Supply Services for the production and distribution of guns, ammunition, vehicles, etc., but to the small items often overlooked but which nevertheless make so much difference to the troops.

Much of the responsibility lies with G.H.Q.(1) but the War Office cannot be completely exonerated. Experience surely has shown a lack of resilience in the ideas of the Staff Officers concerned.

The following are a few examples, not in any way intended to be exhaustive. They could all have been put right by a little thought on the part of those responsible in Delhi and London (or even by asking the "heathens" on the Assam and Arakan front) without interruption to bulk production and in many cases at a lower cost. That at any rate would have pleased "the financial authorities at this Headquarters."

Tentage.

Tents produced even in peacetime should be suitable for use in war. White tents may have looked very smart in serried rows in a peacetime camp but the colour was totally unsuitable for use in any theatre of war. In spite of this, for years after war was declared, tents were produced a beautiful white, even the guy ropes being carefully bleached, whereas they should have been either a drab brown or green for use in the jungles.

Instructions as to the use of cutch or some other means of darkening the tents appeared regularly in orders, and every unit had the job of toning down its new tentage immediately it was issued. This was neither very effective nor satisfactory in a training area and almost impossible for troops in action.

For the monsoon of 1943, the tents sent forward from the Ordnance Depot at Chittagong to the Division in the Arakan were all white, and anything to darken them was "in short supply." This was after nearly four years of war, two of which were against the Japanese in jungle country!

Helmets and Caps.

Up to 1943, it was considered necessary for British personnel in India to wear pith helmets. These were light to wear, effective against the sun but they were bulky and had only a short life in the monsoon.

Although India wore helmets pith, all men were apparently fitted out in the U.K. with the Wolseley pattern. Since the wearing of these marked a man as a new arrival, the wastage was very heavy and was encouraged by most C.O's who frowned on a sprinkling of "Bishops Bowlers" in the ranks. Could not the Wolseley helmet have been withdrawn immediately on arrival in India? Or better still have never been issued and a standard type of helmet adopted?

The War Office before the war produced the Cap F.S. which, however, gave no protection from the sun or rain and fell off at the slightest provocation. The American cap was much more practicable as also was the Scots bonnet.

In 1943 the Bush Hat made a popular appearance, but has now been dropped for the Cap G.S. Olive Green—and what a terrible thing it is! Shaped like a cowpat, badly made, it is impossible to wear smartly. No self-respecting soldier would wear it if he could avoid doing so and I have yet to see a senior officer wearing one, which automatically condemns it. Why, after six years of war, when millions of head-dress have been made, do we have to end up with bulk production of such an article which is certain to be declared obsolescent in its turn?

Clothing. .

The drill clothing issued to drafts in the U.K. was thick, heavy, badly cut and generally unsuitable for use in the East. As in the case of the Wolseley helmet, to wear it marked a man as a new-comer and resulted in the quickest possible wastage. Co-operation with standard patterns and cloths could surely have eliminated this in a month. There would also have been a saving in cost per garment as the heavy U.K. material was more expensive.

The design and shades of clothes manufactured in India showed a lack of appreciation of what was required. Long trousers, towels and underclothes in olive green shades did not reach the troops in bulk until 1944. Khaki shorts, white vests, etc. were still being wasted out in 1945!

Production of articles suitable for war should have commenced in 1939 for issue to mobilised divisions within a year. In fact even if it is necessary for a peacetime soldier to have a white tent, etc., the reserves held against the A.F.G. 1098 should have been suitable for war.

Webbing.

Both in the U.K. and the East, webbing, after issue, was universally blancoed or dyed to a different shade. A well-thought out policy could have ensured its issue in a standard shade for the various theatres of war, which would have been more serviceable apart from the time saved in units.

The Commanders in the field should not be completely absolved from blame, as they cannot have presented their case forcefully enough. One can imagine that, if our new C.I.G.S. had been in command, there would have been a "No green tents, etc., no campaign!" demand.

The M.G.O. in India in his instructive article in the April number stated "The expected period of gestation for the idea should be reasonably adequate—do not ask for something by next Monday." But one can feel no pity for the gentlemen who "carried" such obvious improvements for so many years, or worse still, never conceived them!

THE POST-WAR OFFICER

BY COLONEL R. M. BRUCE, D.S.O., M.C.

A LTHOUGH we do not know the strength and distribution of the post-war Defence Services of Great Britain or of India, the problems and measures to be taken concerning the supply of post-war officers and their training are subjects which merit wide discussion.

We must assume that (a) some form of military conscription will be established in Britain, (b) that in addition to Home forces, Britain will require part of her forces to serve overseas, (c) that the Indian Army will require a number of British officers, and (d) that India will not have conscription.

Fields of recruitment of officers must be as wide as possible; they must include cadets who have selected a Service career at the age of, say, 17 years, candidates from the Varsities, and candidates from the ranks. Attractive terms must be offered, for it must be remembered that if an officer is to finish his career at 45 years of age, that age is too young for most men to want to drop into idleness, while at the same time they will be too old to take up another vocation. An officer must have reasonable prospects of employment till a considerably later age.

As to pay, it will be generally admitted that British rates—pay and pensions—are on the low side. Nevertheless, how is a nation with a public debit of £20,000 to £25,000 million pounds going to approve of rises all round? The alternative is a general reduction in prices of essential commodities, in which case men in the Services can expect relief financially in the form of furnished free or cheap accommodation, and the benefit of purchasing their essential requirements at Government-run canteens.

Accelerated promotion to a limited degree must be provided for in the conditions of service. The C. O. would be the initiating authority, but as all officers would have to attend Company, Command and other schools, reports on their work would receive full consideration; in addition, there should be formation or Command Selection Boards in order to introduce a fairer standardisation.

A time element in promotion and pay should be adhered to. Juniors might often prove as efficient in higher appointments as their seniors (and war conditions seem to prove this), but in the majority of cases experience must be given its due consideration. Civilian business houses usually work on a time-scale for promotion, but employers usually reserve the right to summarily dismiss an employee without the latter having any redress, while in the Services this is not the case. Instead of inflating all infantry commands to majors, I suggest that the Company Command allowance be re-introduced.

When thinking of more advantageous financial terms for the Services one must not lose sight of its many present advantages: generous leave, liberal treatment when sick, the capital value of a pension (which may be partially commuted). One must guard against adopting too mercenary an attitude in this matter of pay, for service in the Forces is an honour, and service to one's country should be of more importance than the emoluments gained.

Selection of officers should be based on Selection Boards, and on a prescribed educational standard. In this connection I would refer to the matter of the

Platoon Commander in the Infantry; he is a subaltern in the British Army, and a Jemadar in the Indian Army. For many reasons the V. C. Os. rank should be retained; these V. C. Os. have proved their worth in the late war, and I would strongly recommend that a similar rank be instituted in the British Army and called "Ensign" or "Petty Officer", the post being filled by promotion from the ranks. Apart from its intrinsic value, this step would have a recruiting appeal and would help to ease the officer situation.

The position in the British Army on this subject has been somewhat intriguing by the attitude adopted by the Army Council which, having approved the appointment of Platoon Sergeant, suddenly abolished it. At the same time a senior officer was severely censured for supporting the old school tie theory as an essential qualification for an officer. The two decisions seem irreconcilable. It seems that the Platoon Sergeant had not been given the best chances or the proper training. Surely if the Indian Army can fight second to none with ten or even fewer "full" officers, the British Army can also?

What of the officers' training? I must assume that all educational curriculums in Western nations will change radically—for if they do not Western civilisation will assuredly erash. Thus among all classes there should be better material to train. At the same time there must be better facilities for training teachers—and this applies also to Service schools, where much of the teaching has been stereotyped and unimaginative.

Officers must be trained at a combined training school for land and air forces. Naval forces do not normally operate on land and should have their own training establishment. I would suggest the following syllabus:

First year. Physical development, elementary drill, disciplining (instead of making permanent N. C. O. cadets there should be continual changes so as to give as many as possible a chance of developing leadership and character); academic subjects, mathematics, chemistry, geometry, history, and in India, English, Urdu, or Hindi.

Second year. In addition to more advanced classes in the above subjects there should be included mechanics, drawing and surveying.

Third year. Simple tactics, and demonstrations of work in all branches of the Service. At this stage the cadet could state his preference as to the Service he wishes to join.

Fourth year. Military history, military law, economics, and ethics to be included.

Throughout their training, all cadets should be encouraged or compelled to take up a handicraft or hobby. Some time during their third or fourth year cadets should serve for six months in the ranks of a regular unit of the branch to which they are eventually to be posted. Flying experience should be given to all cadets, and flight training to each cadet who intends to serve in the Air Force.

Cadets would be commissioned at the end of the fourth year, whence they would go on to a specialist school. Infantry, Artillery, R.E., Armoured Corps, etc.—to learn the technicalities of his chosen branch. None of these courses should be less than three months; some will have to be considerably more. The age limits for the Cadet Colleges should be from 17/18 to 21/22 years.

Bearing in mind holiday periods, the Cadet Course could not be shortened, but special qualities and outstanding work should permit of the cadet receiving accelerated promotion to a higher group. Candidates who have already been through a University would do the third and fourth year periods. Individuals

to be commissioned from the ranks would also take the two latter years' course, but instead of serving six months in the ranks would have to devote that time to general education.

After having served for five or six years, the young officer would attend a so-called Company Command School, in which tactical training would be undertaken. All branches of the Land Forces would attend this school, and from it selections would be made for the Staff College.

The Staff College visualised at this stage would be a College designed to teach staff work; it would not cover two years, but six months. In my opinion the old two years' course was wrong, being based on two aims; (a) the training of staff officers, and (b) the training of potential B. G. S. and formation Commanders. There was too little assistance in the former (especially for the lower grade staff appointments), and by the time any of the latter were likely to assume such positions much of the teaching was out of date.

Having attended a Staff College course, and having done some years of staff work, an officer would be given the chance of electing either to remain on the staff, in other words, to join the Staff Corps, or to concentrate on regimental work. The second alternative would not debar him from consideration for promotion to higher commands; far from it.

A Senior Officers' school must be retained, open to majors, and available to officers of the Staff Corps. Higher training methods, schemes, co-operation between all arms, the exercising of potential formation Commands are some of the subjects to be dealt with at this school. The old adage of "fitting every one for the next higher rank" showed far too narrow an outlook.

Finally, there should be a Combined Services Defence College; admission would be by selection, and it would cater for considerably larger numbers than formerly.

If conscription is maintained in the U. K., it seems probable that the Territorial Army will disappear, but a form of Home Guard may be retained, as well as some volunteer static units such as local A. A. and Coast Defence formations. Wartime expansion of the regular force will be achieved by taking in ex-conscripts and reservists. In India, where conscription almost certainly will not be introduced, there must be a larger reserve and Territorial Army units.

In both countries a big problem will be the provision of officers for expansion. University O. T. Cs., if efficiently trained, can help in this, but they cannot provide all the numbers required. Other means must be found. Two measures suggest themselves; (a) a short-term engagement, which might be attractive in the Navy and Air Force but doubtful in the Land Forces; and (b) potential officers would have to be excused six months of their conscript training, provided they agree to join a reserve, for which they would have to do six months with a regular unit, followed by periodic training and courses. Various arms would have to have their own Reserve Training Centres, which might be at Regimental Depots; as an added attraction a longer or even total period of conscript service might be excused.

What of the active and efficient officer of 45 years of age, who has failed to get command or has completed it, and for whom few equivalent or higher appointments are available under normal conditions? I suggest that schools of all natures employ more senior officers, who could be found from the above categories. The financial effect of this would not be very serious, as the appointment of. "Ensign" or "Petty Officer" would reduce the pay roll of a unit considerably

Some of these 45-year old officers should be given jobs in Higher Formation Headquarters, the Admiralty, or the War Office. Moreover, if some younger officers were released from some of the junior appointments, the work could be done as well and as quickly by fewer more experienced senior officers. The financial effect would not be serious, but the proposal will involve senior officers doing some amount of bottle-washing work, which would often be preferable to sweeping streets. Conscription and all it involves, such as the registration of the civil population, etc., will also create work, allowing for more openings for Service officers. Administrative work in NAAFIs and Ordnance shops may also give employment to these 45-year old retired officers.

There is every reason why, concurrent with the conscription of males, there should also be conscription of females. Women could take a share on the land work, in Service offices, in nursing work, and in administrative posts. "No duty, no vote" should be the maxim. Rousseau's theory of "the Rights of Man" has been the most vicious and demoralising slogan which could have been adopted by democracy. Neither man nor woman has rights without performing some service to the State or their fellow-creatures. A woman performs this naturally by child-bearing. The mother has earned her rights, and also, of course, exemption from conscription.

No account has been taken in this article of the probable effects of the atomic bomb on plans of development of the military art. They may prove all such plans to be moonshine. It is insane to think that any weapon can be banned from use.

The next war between "civilised" nations will probably end in the fashion portrayed by the picture of the monkey attending the dying moments of the last human being on earth, who said as the mortal breathed his last: "And now I I shall have to start all over again".

Wellington College Memorial

The Governors and representative Old Wellingtonians have launched an appeal for funds to commemorate the 460 Old Wellingtonians who have given their lives in the Second World War.

Donations received will be paid into the Wellington College (1941) War Exhibitions Fund to assist in the education at Wellington College of the sons of Army, Navy and Air Force officers, with preference to Old Wellingtonians, and of any Old Wellingtonians killed or incapacitated by enemy action; and a small portion of the Fund will be devoted to a visible Memorial.

The organisers of the Fund suggest that the purpose for which it is to be raised may appeal to other than those who have intimate associations with the College. The percentage of Wellington boys passing into H. M. Forces during the last eighty years presents an unusual record, and it is estimated that since the College was opened in 1859 one Wellingtonian in every ten has been killed in action.

Cheques should be made payable to the Wellington College War Memorial Fund, crossed Barclays Bank, and sent to Barclays Bank, Goslings Branch, 19, Fleet Street, London, E. C. 4, or to the Chairman of the Fund, E. Gould, Esq., at Wellington College, Berks from whom any further information may be obtained.

THE VALLEY OF THE GODS

By Major J. E. HEELIS.

CONVALESCING after an appendix operation, I decided to spend my month's sick leave in Kulu. Travelling by rail you leave the main line at Amritsar for Pathankot and onwards by road. It would be quiet and a change, and was only some 150 miles away from my station by road. My kit included two tents, one for myself, and one for my bearer, cooking pots, and enough tinned food to last out the stay, helped by local purchases. I was lucky in having a bearer who could also cook. The cost, of course, depends on the individual, but for what it is worth my trip worked out at between Rs. 300 and Rs. 400 for the month. I took tinned butter, jam, meat, fish, biscuits. Eggs, vegetables, mutton, and fruits are easily obtained at reasonable prices.

The road through Mandi State is very badly surfaced, and must be one of the twistiest roads in India. It is mainly a one-way traffic road, controlled by barriers. Mandi Town has a pleasant modern Rest House, an ideal half-way halt. A long journey in an Indian bus, even if one succeeds in getting the front seat, is not at the best of times comfortable. I am usually fated to sit next to a mother and child, one of whom is invariably sick before we have been long on the road. This time was no exception, and the halt at Mandi was therefore most welcome. After Mandi Town, the road, cut out of solid rock, twists on up a narrow gorge, and in one or two places has actually had to be built out from the rock face. At Aut a bridle track leads off to Simla.

The Kulu valley itself is one of the prettiest in the Himalayan belt. It has not yet been "discovered" in the same way as Kashmir, although it has much of the latter's beauty and in some ways exceeds it. It has at the most no more than half a dozen hotels, all quite small, but very pleasant and well-run. Several English people, impressed by the scenery, climate, and the fertility of the soil, have settled permanently in Kulu, and seem to thrive there. It is also becoming popular amongst Indian families as a summer resort, and many of them have since bought property in the district.

The valley is long and narrow and down its whole length tumbles the Beas river, one of the five rivers which give the Punjab its name. Some years ago, an enterprising Game Warden stocked the Kulu stretches of the river with English trout, and a trout hatchery is still maintained at Katrain. As a result, the Beas in Kulu offers some of the finest trout fishing in India. Below the valley the water becomes too hot, and there the mahseer holds sway. The unusually heavy monsoons of the last two years have done a lot of damage, and many fish have been killed off. It will not be long, however, before Kulu again offers itself as a fisherman's paradise.

Both banks of the river are lined with alder trees, giving it a very English appearance. In fact, in one's travels through the Valley one is often reminded of England, especially as the countryside is so delightfully green. There are many fine English apple and cherry orchards, and in one garden I even found English black berries being cultivated. The fruit grown in these orchards, especially the apples and cherries, is of excellent quality, and the trees seem to grow well in all parts of the Valley.

From the Kulu fruit growers' point of view, the chief difficulty is the marketing of the fruit, due to the long outlet road through Mandi State. At the beginning of the war, the Punjab Government had started widening the main road to Kulu, so as to be able to run two-way traffic. If this is completed as part of the Punjab post-war roads—scheme the fruit will be marketed more easily than at present and in excellent condition.

I made my headquarters at Manali at the head of the Valley, where the motor road ends. Manali has one hotel run by a retired Army officer, but having decided to do my leave on the cheap, I decided to live in the Rest House the first night, and find a suitable camp site the next morning. A great advantage of travel in the country districts of India is the number of excellent rest houses one finds everywhere. It is interesting to remember that in this area anyway, they are the equivalent of the old English Post Horse Inns, as they mostly date back to the the days before the advent of the motor-car, and are therefore, spaced out across the country in terms of one day's journey in a tonga.

I finally chose as my camp site a small grassy spot, sheltered on the one side by a group of fine Deodar trees, and on the other by a large granite boulder. Here the tents were pitched, and before long we had made ourselves very comfortable. Just below my tent, the waters of the Manali nala tumbled down over boulders and rocks to join the Beas river a mile below.

On the same level as my camp, ran three water channels,—one more than a mile long—which supplied the motive power for several small mills for grinding flour. The mills themselves would have delighted that inventive genius, Mr. Heath Robinson, in their ingenuity! Their chief disadvantage from my point of view was the lowness of the roof, which forced one to crawl on hands and knees to get inside, and when there, one could only crouch or squat—it was quite impossible to stand up. These mills are most picturesque and are fascinating to watch in action.

As I was still recovering from my operation, I took things easily, getting up late and going to bed early. The latter was not difficult, as the evenings are very cold and I was only too glad to get into my warm "Jaeger" sleeping bag after my open-air supper. The snow waters of the Manali nala were more than I could bear for washing in at night, but I made up for it by having an extra good wash after the sun got up in the morning. We had one or two heavy showers of rain during the stay, but my old but serviceable doublefly tents stood up to it well. My bearer turned out to be a better cook than I had expected, and meals, although simple, were good. What could be more pleasant at the end of each meal than ripe red Kulu cherries straight off the tree!

Kulu is known as the "Valley of the Gods", as wherever one goes, even to the smallest villages, one finds that the villagers have their own God in a small shrine or temple. The Gods, many of them, I imagine, very old, appear to be modelled in clay and are usually dressed in neat clothes. Every year at the time of the great Dussehra festival they are carried down in State by the young men of the village to a big mela at Sultanpur, the capital, where they are paraded through the streets in colourful procession, and much dancing, beating of drums, and general merry-making takes place. Each village brings its own God, and after the festivities are over, they are again carried back to their respective villages.

The old summer capital, Naggar, is on the east side of the river. It is well chosen as the chief residential area of Kulu. There are some fine old houses there, with well kept gardens. Naggar commands a fine view up and down the Valley, and the view of the massive snow peaks towering above is most impressive. The ancient castle, now converted into a Government Rest House, is of interest.

For many centuries it was the royal residence of the Rajas of Kulu. The building looks impregnable, as it stands on a steep precipice and in a very commanding position. It has stood up to the stress of both storm and earthquake, probably due to the give and take properties of its walls, which consist of layers of weather resisting stone, between solid beams of wood.

Above the castle is an old temple, and at some little distance from it are some quaint carvings, probably relies of the days of the Rajas. Round the second storey of the courtyard at the back of the castle run wooden balconies, from one of which, it is said, a Rani threw hers if to the ground many years ago. The reason for this quick and fairly certain suicide was, so the local rumour goes, that she was suspected by the Raja of keeping a secret lover in hiding in the castle. She proved her innocence, however, by the fact that when her body touched the ground it immediately turned into a stone figure!

No mere photograph could do justice to Naggar. It needs an artist to portray faithfully the dark deodar forests above, the silvery mountains in the hazy distance and the brilliant colours of the crops in the terraced fields leading down to the river below. I can think of no other tree in the world which is quite so impressive against a background of snow as a fully-grown deodar. Opposite Naggar on the main motor road, connected by a rough cobbled track and a bridge over the river, is Katrain. Here some of the best fishing stretches in the Valley are found. The grass is of a real English green, and the alder trees on either bank of the river give welcome shade from the sun.

Between my camp and the Manali bazaar was a small deodar forest, through which I walked each morning to the Post Office to collect my mail. Several water channels run through this forest, and large bunches of mauve irises grow wild on their banks. In τ clearing in the trees on a hill to the west of Manali there is an interesting old temple of Buddhist origin. Entirely constructed of wood, the carvings are particularly interesting, and I was able to recognise in addition to the usual Gods and Goddesses—elephants and tigers (neither of which are found in these parts), eagles and hawks, and a type of wild dog not unlike a jackal. Round the edge of each storey of the roof hung a line of carved wooden tassels, each suspended from a small wire hook. The slightest breeze caused these to tingle together giving a pleasant almost bell-like sound.

Being keen to see the inside of this temple, I called at the group of houses nearby, and found the Priest, who had the keys. He opened the door, and leaving his shoes outside in the usual Indian style, went into the dark interior. Naturally I was not allowed inside, but the Priest lit a candle, and allowed me to stand at the door and look in. I was surprised to find that the temple had been built over the top of a massive black granite boulder. The building, although high, only just covered the top of it. The Priest pointed out to me with great respect and reverence, two large footprints on a slab at the base of the boulder, which he said were the actual footprints of some God. To me they appeared most unnatural footprints, but the Priest placed great faith in the truth of the story!

Some three miles above my camp by the Manali nala, along a narrow and rather steep path, is the village of Bashisht. This, too, is considered to be an extremely holy and sacred place, but of a different type. Bashisht at first sight is no different from any other Kulu village. The houses are well built with stone and slate, each with a wooden balcony on the top floor, and with the

corners of the roof turning up slightly in the Tibetan style. The villages are inclined to be a little dirty, and usually have many rather dirty but most cheerful children playing in the streets.

Bashisht, however, differs from other villages, in that it is the proud possessor of a hot sulphur spring. The water from this spring runs into two stone tanks, one open to the air, and the other enclosed in a small covered room. The latter is intended for the use of the women, and the former for the men. The tanks are enclosed in a courtyard, which also holds a small temple, containing one of the famous Kulu Gods. This particular one has a very black face with silver eyes, and is dressed in a long white robe. The smell of sulphur was strong, and the water so hot that I could not bear to hold my hand in it for more than a few seconds at a time.

To anyone who, reading this article, has ideas of a camping holiday in Kulu, I would issue one word of warning. There are almost as many flies to the square mile in the Kulu Valley as there are to a square mile of an ordinary Indian city. Although the air is wonderful, and although the countryside is fresh and green, yet one gets these flies. No one seems to know the reason, but it is possibly due to the large number of cattle, sheep, and goats which pass through. It is essential therefore, to include in one's kit a couple of extra mosquito nets to keep the tents fly-proof, and to keep the flies from the food. Nearly all the bungalows in the valley have fly-proof windows and doors.

If one is interested in exploring further afield than Kulu there is a very pleasant trek over the Rohtang Pass into Lahoul, which can be done in easy stages with rest houses at each stage. The country is similar to Tibet, and its inhabitants have distinctly Mongolian features. They are tough and wiry and in many ways resemble the Gurkhas. Numbers of them have been enlisted into the Army during the war. The capital, Kyelung, is well worth a visit. There is plenty of scope for mountain climbing for those who are keen on it; the necessary porters and hill ponies can be arranged at Manali.

On the Rohtang Pass one hears the story of the snow-monster, who, if seen, is so terrifying, that if one is not actually killed by it, one is struck dumb for life. The monster is reported to be of a great height, and very powerful. It usually appears in a snow storm, and can run very fast down hill. The same story is told in other parts of the Himalayas, especially in Nepal, where the Gurkhas firmly believe in its existence, as also in various other "bogeymen" such as the Banmanchhe (lit. "the Jungleman").

It would be interesting to trace these stories down to their source, as certainly in the case of the snow-monster, the story is almost exactly similar in completely different parts of the Himalayas. To take Lahoul and Nepal as examples, the two peoples who give the same description of the monster, speak two entirely different languages and do not intermix. Is it possible that there has in the past been an animal of some kind, not yet known to science, the description of which has been passed down from father to son for generations?

The Kulu Valley and beyond abounds in places of interest, and for anyone who wants a quiet holiday in the hills, it is to be strongly recommended. The people, although inclined to be rather lazy, are always most cheerful and friendly and like most of the hill races of India, make one feel at home with them from the start. By the end of my stay I was loath to leave such a friendly and pleasant area, and I am very much looking forward to other visits in the future.

WITH THE INDIAN VICTORY CONTINGENT IN BRITAIN*

BY LIEUT.-COLONEL P. H. DENYER, O.B.E., M.M.

IT was an opportunity which so many of us have dreamed of to watch the sepoy's reaction to the wonders of Britain. During those interminable airless hot-weather evenings in Punjab plain stations, after the inevitable hockey game, when one sat still, damp and exhausted but strangely contented drinking some unnameable concoction on the touch line, or in the V.C.O.s' club, whilst a brassy sky resolved itself into the kindlier blue and purple of night: and the bugle called faint but sweet from the distant lines, or, at the end of those long days after black buck or duck, when full-fed and contented one joined in the conversation between the solitary companion, a sepoy orderly, and the forest bungalow staff. It is on occasions such as these, when talk slides north and south over the world and inevitably comes to rest upon "Wilayat" "that the thought comes surging forward again "How I wish I could show England to you!"

Well, here was the chance wrapped up in a memorandum from the India Office, offering an extension of leave and out of pocket expenses in exchange for duty with the Victory Contingent as "Conducting Officer". One eagerly reached for pen and paper to reply, and instinctively compiled a list of chaps one hoped would find a place in the contingent. What greater pleasure could there be than to meet them all again in the heart of London: but for so many of them there would be no Victory Parade, as the long trail of Indian graves from El Alamein to Venice now testifies.

But, despite the rain, the reunion in the damp evening light of Kensington Gardens on May 23rd was a joyous one, quite heart warming. How incongruous it seemed to hear Salaam sahib and Sat Siri Akal, Huzoor in Hyde Park! How quickly one slides into fluent Hindustani even after a long break. Expressions and idioms half forgotten, come tumbling unconsciously from the lips. What a lot of nice grinning faces there were! How good and white were the average Indian's teeth. What a lot there was to talk about as the water dripped from the plane trees and made popping noises on the bell tent dimly lit by a single hurricane lamp: and how well they all looked.

Mohinder Singh and Hari Ram were there, both very proud of their decorations, last seen "fratting" with sturdy Italian wenches at San Giorgio on the road to Trieste. There was Bara Singh of Patiala, who, since our last meeting had won an I.D.S.M. in Burma, Rang Bahadur, now a Jemadar, who had done so well at Ruweisat in 1942 and Allah Yar Khan of the Armoured Corps, who had towed us into Beirut on that hot July day: and inevitably the slim soft-spoken ex-I.M.A cadet, now a Major, with a M.C., wearing the insignia

^{*}Just as this issue was completed for Press we received two articles concerning the visit to England of the Indian Contingent in the Victory Parade. The first article appears above, and but for the fact that the Journal had been made up and "put to bed" it would have appeared on an earlier page.

The second article, written by a V.C.O. from the 1st Punjab Regimental Centre, is a fascinating and vivid description of Britain as seen through the eyes of an Indian soldier, and it will certainly be read by all present and past officers of the Indian Army with great pride. We propose to publish it in Roman Urdu (with a slightly condensed version in English) in our January issue.

of a famous Infantry regiment, who aided recollection with "You gave me fourteen days for sleeping during one of your lectures!"

Someone at the India Office had certainly worked overtime to prepare the programme of entertainment and sight-seeing that was offered to the contingent. The Welfare section at the India Office did a great job. For the purposes of entertainment, the contingent was divided into convenient parties each about one hundred and thirty strong. Number one party consisted of ten officers, seven V.C.Os. and one hundred and twenty-four ranks of the Royal Indian Navy, Royal Indian Air Force and the Indian States Forces. The programme for each party was practically the same and was so arranged that when No. 1 party was seeing the Houses of Parliament and Westminster Abbey, No. 2 party was at Madame Tussauds and No. 3 at Whipsnade. The long journeys were made by motor coach, the shorter ones by 'bus or Underground. The Conducting Officer's task was to shepherd his flock through the maze of London traffic, and generally behave as guide, interpreter and explainer. Not infrequently he was called upon to be the party cashier.

There is no doubt that the present day sepoy after six years of war experience in Europe, Africa or the Far East, is no more the untutored country bumpkin. Those who had served in the 8th Army had seen Cairo, Naples, Rome and Venice—perhaps Athens. The 14th Army has also provided experiences for the erstwhile countryman, after which he no longer stood in wonder at Western modernities. London of course, stands in a class of its own and has something which no other city can quite equal, and the charm of London soon gripped the members of the contigent. The R.I.N. and R.I.A.F., most of whom could talk English, got off to a quick start and their immediate reaction was a genuine delight in the friendliness of the Londoner. The soldier of the States Forces was perhaps a little shyer and therefore a little slower to accept the London civilian as his friend: but that did not last long.

After spending a day at Lords Cricket Ground watching the Indian team playing the M.C.C., thirty or so men of No. 1 party returned by Underground from St. Johns' Wood, via Baker Street to Bayswater Road, which was the nearest station to the Victory Camp. Although the London public is not easily startled, the sight of a stream of smart Indian servicemen, many wearing pugarees, caused quite a stir as we threaded our way down the escalator. Having with some difficulty dissuaded one light hearted group from joining the up going stream and therefore getting another escalator ride, the party arrived intact at Baker Street. The officers desired to be taken to the West End to dine; the men were set for getting back to camp.

I found the correct platform and ranged the party up ready to dash for the train doors. I explained to the N.C.O. that having boarded the train, they should pass two stops and alight at the third. The train arrived and our party surged on with an alacrity truly gratifying. As the tail lamp disappeared I was struck by a horrid doubt and questioned a woman porter. Without looking at me, she continued to suck her teeth and gave answer:—"Bayswater Road? No. Next one goes to Bayswater Road". With no little misgiving I accompanied the officers to Ramaswamy's restaurant in Swallow Street: but I need not have worried. They got home all right. A far sighted Providence had ordained that each man be given a private identity card which stated that the owner was a member of the India/Burma Victory Contingent and that he was in London to represent his country in the celebrations. It carried a request that he be directed back to Kensington Gardens.

The camp in Kensington Gardens was certainly not the best we encountered, and "G" lines was not on the best site. The contingent shared "G" lines with detachments from Africa, Iraq, Palestine and Transjordan, Cyprus, Ceylon, Malta, Malaya and Fiji. (The officers of this last country wore a startling walking out uniform consisting of the usual service dress jacket with SB. belt, with below, a sort of kilt of the same material with a petal shaped fringe which reached below the knees. The legs were bare and the feet encased in sandals). The weather was atrocious; scarcely a day passed which had not a share of rain and on occasions the leaden heavens shed a downpour which lasted throughout the day. Pools of water formed between the close pitched bell tents, and continual vehicle wheels formed large areas of thick greasy mud. Clothes and bedding felt damp to the touch; a small rivulet ran between the tables in the officers' mess. Yet amidst all this depressing dampness the men remained uniformly cheerful and amazingly enthusiastic. The turn out was irreproachable.

The entertainment programme was sufficiently packed to allow little time for moodiness about the English climate. The troops were offered some form of outing on practically every day, except those set aside for practising the march past, for rest and cleaning and for private sight-seeing. His Majesty the King accompanied by the Queen, Princess Elizabeth and Princess Margaret visited the Camp on June 6th and for once the sun shone fitfully. The Royal Party walked slowly between lines of troops drawn up on each side of the main path leading from Alexandra Gate. To the evident delight of everyone, the Commander-in-Chief, newly appointed Field Marshal, was in attendance. For the Indian servicemen, particularly the older soldiers, there is something personal between himself and the King Emperor. It seemed as if each man stood an inch or so taller, the natural pride in poise and bearing being even more marked. The three V.Cs. in the contingent were singled out for special attention and each officer was presented to Their Majesties. The Queen chatted animatedly and with evident enjoyment to many N.C.Os. and other ranks.

The Derby deserves special mention. A whole coach load of us, officers, N.C.Os. and men, in fact anyone who wanted to go, arrived at Epsom at 12-30. The rain fell dismally. The bookies all around the coach intrigued the men as much as any of the hundred and one novel sights that Derby Day offers. I was led into explaining the intricacies of win and place betting and how the odds worked. What I had been fearing came at last.

"Colonel sahib, which horse will win the first race?" I protested I could not tell, and that I disapproved of betting in general: but they were unmoved.

"But which horse", they persisted, "are you yourself going to back?" In desperation I glanced at the card and saw Gordon Richards name. I mentioned the number, declaiming that no one must hold me responsible, that betting was only for fools, that I knew nothing about the horse.

"Give us your money", they said, "and we will make your bet with ours".

Need I add, the horse won and the contented backers returned voluble and happy, clutching a sheaf of currency notes as if it were the most natural thing in the world that they should be given a lot of money by the nice bookmaker: but that wasn't all. Gordon Richards won the second and fourth race, and the small each-way stakes mounted comfortably. The Derby (I backed Khaled and by then was omnipotent) was a disappointment, but they kindly held me not

to blame. At the end of the day we had backed four winners in six races, and I was uncomfortably conscious that I had been instrumental in making at least six Indian soldiers firm addicts to turf betting.

Everywhere we encountered warm friendliness and welcome. The manager of a famous Speedway Racing Stadium turned out to have served with Indian troops in Burma, and hastily prepared a snack supper with drinks after the show for upwards of seventy men: all this in this land of rations and shortages. The Secretary of the Agricultural Committee of one of the Home Counties, where we were shown farming in all its aspects, had called in a score of county folk and their cars to act as guides.

At one suburban stadium we crashed, unheralded, a special circus show for London school children. The management refused to allow us to depart, and somehow found seats for a hundred and twenty of us. As we entered the stadium the cheer leader in the centre of the arena was announcing into the microphone:—"And now, children, we are honoured today with a visit from some members of that wonderful fighting country, India. Here they come, all boys who fought in the war in Burma, in Africa and Italy, who fought for you every bit as much as your fathers and brothers did. Let's give them an extra special cheer!" And as the children stood and roared their welcome, the troops, with that unerring sense of dignified good manners and behaviour which is their birthright, stood up, bowed and then waved their hands and laughed happily. For my own part, I had an unmanly desire to cry.

Many abler pens have told the story of the Victory Celebrations on June 8th. This narrative is concerned primarily with the Indian Contingent, but perhaps a word explaining the general attitude in London is of interest. A difference of opinion was rife among the people of England as to whether any celebration was called for. The world situation caused grave disquiet, the country as a whole was tired, even disillusioned and bitter. We could not afford the expense of celebrating and anyhow what had we won that caused for mafficking? To Londoners particularly the fencing-off of Kensington Gardens for months was a bitter pill. It was the barbed wire and the crude latrines desecrating London's much loved spaces that caused angry letters in the press. Somehow the erection of flags and decorations irritated the war worn civilian and his queue-harassed women-folk and they awaited the celebrations sullenly.

The tide of feeling appeared to turn at the end of May. Suddenly the streets were thronged with white, brown and black sailors, soldiers and airmen wearing fantastic foreign names on their sleeves. They were beautifully turned out, very happy to be in London, and eager for the sights of this fabulous city about which they had heard so much. The Londoner succumbed immediately, his exasperation evaporated. Somehow he hadn't fully realised how much of the war had been fought away from England, France and the Low countries. All these Empire people who had never seen England before had played as big a part as he himself had: and they had come thousands of miles to celebrate their victory. "All right", said the Cockney, "If they want a celebration they deserve it and they shall have it, and we'll all join in". From that day onwards there was never any doubt of the success of London's Victory Day.

I, who have seen much military ceremonial, found myself moved to strange emotion by this parade for Victory in London. No colour save the khaki and two shades of blue, no glistening harness save drab webbing, no warring plumes only the unmilitary beret. True, there were serried ranks and martial

music but this procession against London's superb background contained men who carried no weapons: miners, firemen, bus drivers, air raid workers, and women who were of no military service, nurses, women land workers and factory girls. Even the mechanised column included rescue and war debris cranes, farm tractor and binders and blood transfusion vans. So many had been caught up in this war other than those who wore the fighting uniforms.

India came third on the list of the marching column. First the Allied Forces, then the Dominions, then India and Burma followed by the Colonial Empire. The Home Forces followed later. Even in all that gallant company of picked men and women, the Indian contingent held a high place for pride of bearing and faultless turn out. The Indian soldier loves ceremonial and will always give of his best when the crowds are looking on. The pipe band of the 8th Punjab Regiment in blue pugarees, drab uniform with blue cummerbund and smart white spats headed the Indian procession followed by the R.I.N, then the Army with the band of the Royal Garhwal Rifles in rifle green uniform and pill-boxes, in the centre; the Royal Indian Air Force brought up the rear.

There must have been many past and present members of the Indian Armed Forces amongst the onlookers whose hearts surged with justifiable pride as the Indians went by. But then this was a day when the emotions ran the whole gamut from tears to rejoicing, when even the rain which fell in torrents during the afternoon could not quell the spirits of the immense crowds which had surged into London. Public dancing went on in the parks and the crowds were wedged tight down by the river for the firework display. One party of Indians only succeeded in crossing Westminster Bridge by forming a human battering ram in single file with a young British officer at the head. He admitted losing all but two men on his return journey after the display.

Victory Day over, we returned to the entertainment programme again: but a lot of the entertainment was private, given by past and present officers of the Indian forces who visited their friends in camp and took away two or three men to a meal in hotels and restaurants or to private houses. One such party saw life from a dinner table in a private room at the Savoy! Imagination boggles at the size of the bill! But the sepoy wished to sample everything and nothing seemed too small for enquiry. The statues in the streets had to be explained. The Crimea statue near the Senior, George III in Cockspur St., Douglas Haig and the Cenotaph were simple: but there were others which I had passed a hundred times of which I was woefully ignorant. I was once questioned about a statue opposite the War Office and a hasty look informed me that it was the Duke of Clarence. In my mind I framed an answer: "Yih to ek puráne bádshah salámat ka rishtedár tha, jo ki malmsey sharàb ka ek butt men dubgáya tha": but I took another look at my interlocutor and decided against it. Lamely I drew attention to the Life Guards. Yes, we conducting officers certainly learned a lot about London which previous years of association with that city had not taught us.

The reactions of the sepoy to London were universal in general. Buckingham Palace was a disappointment, the traffic so immense, orderly, above all, silent; the crowds, too, were so orderly and friendly, queueing rather a delightful game, the police so authoritative yet unarmed, the houses so small yet so comfortable. The transport complications, particularly the underground, they never solved but they quickly learned that a Number Nine 'bus in Piccadilly earned salvation and the 'clippie' could always be counted upon to put them off at Exhibition Road. The bombed sites, cleared though they were, were

impressive: the coupon system an invention of the devil designed obviously to prevent poor visiting Indians from purchasing the present of clothing made in

England, which each was so anxious to take back with him.

The revues and music halls were fascinating, particularly the Coliseum with its revolving stage. The troops could have understood but one word in ten but they happily joined in the general laughter. The officers preferred the straight plays. The children were a source of great joy, for there is a child-like spirit in the Indian serviceman to which the English child responded quickly. Of the shortages and restrictions under which the Londoner struggles they had but the haziest glimpse, which is perhaps a pity for they cannot understand how Britain is still paying for the war. In Camp the contingent ate Indian food brought with them, and the ample hospitality cannot but give them an incorrect picture to take back.

There is a limit to what can be crowded into three weeks and the men became perhaps a little satiated towards the end. They wanted more time to walk the streets unattended, to stare into shop windows, the sophisticated ones to make friends with the girls, in short, to roam where the fancy took them. I questioned a lot, but the abiding recollection differed with individuals. With one it was a tape machine he had seen in the Houses of Parliament! They will need time to sort out their impressions. How I'd like to be there when they tell the tale under the village banyan tree!

For the provincial tour the contingent was split into three parties. One went to Germany, the second to Birmingham and Manchester, the third to Sheffield and Newcastle. The latter two parties joined again at Edinburgh and together went on to Glasgow. Each party was commanded by a senior officer (Indian) and the conducting officers were distributed among the three parties.

The visits to the industrial towns followed broadly the same programme—arrival and settling into camp, a civic reception by the Lord Mayor to every member of the party, a march through the streets culminating in a salute to the Lord Mayor in the main square, a visits to the factories, and such entertainment as the city fathers laid on. The visit were of necessity short but of much interest to the troops. Birmingham provided my party with a tour of the Lucas lighting factory, where each process in the making of the complete motor car head light set was shown to us. One carried away the picture of slowly moving belts, of rows of nimble fingered girls, who turned some yellow wiring and a steel plate into a polished headlight with glass and bulbs complete in astonishing time. The management was impressed by the questions the troops asked, of payment, hours of work, supply and quantity of production.

In Manchester, we visited a calico printing firm, who showed us material and patterns in the making which set the sepoy off again with his wail about the coupon system. "It's for export only" said our guide "May be you will find it in India." But they all wanted something bought in England. "I served with 78th Division in Italy" said one young director of this firm "and I always admired the Indian divisions I met. I envy you command such troops." I could think of no words adequate to reply to such a generous tribute. I repeated it later to the men.

The weather took a turn for the better as we crossed the border early—dreadfully early:—on the morning of 21st June, The Lord Provost of Edinburgh received us, and a number of civilian guests the same evening. A notable remark in his speech was, "I can only hope that should another enemy assail us, you will

be by our side." The replies made in return to these civic speeches, in each case by the senior Indian commissioned officer present at the reception, were surely models of what such speeches should be, quite soldierly and sincere: a greeting to our hosts, a reference to the fact that the contingent contained representatives from all parts of India and Burma, a tribute to the part played in war by industry, an appreciation of our British comrades-in-arms, our genuine pleasure at the warmth of our reception. The spontaneous and continued applause which followed must have been full reward for the officers who were called upon to face the terrors of public speaking. The speeches were translated and spoken in Urdu for the benefit of the men who loudly applauded all tributes to their prowess in war! Will any of us quickly forget Princes Street in the sunshine, or the Castle, or the 8th Punjab pipe band playing "Retreat" in the square at the Castle gate? The perfection of that band! The rhythm, precision and technique of the drummers! It was even a challenge to the pipers of the Highland Brigade, and a dense crowd of Scotsmen applauded long and loud.

We took to the road for Glasgow, by Stirling, Falkirk, Callender, and Loch Lomond: but the pace had been hot and the sway and rumble of the coach was an irresistible soporific. The beauties of the Trossachs were wasted on rows of snoring soldiers, who woke only to return the waved greetings of passing trippers. But Glasgow gave us another chance to see the natural beauty of Scotland and our trip down the Clyde to the Kyles of Bute and back again through the noisy shipyards, was long talked of. Again the sun shone brilliantly throughout the day. It will, I fear, be difficult to convince the men that the rain is not continual in England, and the sunshine of Scotland permanent. Glasgow showed us the technicolour London Victory parade film—a wonderful picture—and presented us each with a beautifully bound copy of Robbie Burn's poems.

What have they all taken back in their hearts? Truly it would be hard to say. One spoke happily of the wild flowers he had gathered in a Sussex lane, another of sporting guns seen in a London shop, a third of the greenness of the grass and trees, a fourth of the gaieties of the Belle Vue Fun Fair. A strange mixture of comment, some shrewd and penetrating, some naive and childish. The British are a bit bewildered about them too. No man spoke of politics, none knew of hunger and starvation in India. But one fact, I swear will remain with the Indian men who came on this visit to Britain. It was told to me one night at Edinburgh, by a rating of the Royal Indian Navy, as we sat in camp and watched the near-midnight twilight still lingering over the roofs of Retford Barracks. "It's the people," hesaid, "the ordinary people you meet in the streets. They're so kind and courteous."

LETTERS TO THE EDITOR

THE ATTRACTIONS OF TASMANIA

To The Editor of the U.S.I. "Journal."

Dear Sir,

I was greatly interested in Mrs. Green's letter on the above subject in the January issue of the *Journal*, which was forwarded to me from Simla to Hobart, Tas.,—for, being a Tasmanian, I naturally gravitated back to my homeland when I left India at the end of last year on leave pending retirement.

I have since had the pleasure of meeting Mrs. Green and discussing her letter with her, and we now hope that we shall be able to form some kind of unofficial association to give advice and help to officers about to retire on pension from India, and who may be making their homes in this Island. I have also had an interview with the Premier of the State, and have pointed out the desirability of ensuring that reliable information about Tasmania is made available in India.

We are at present handicapped here by an acute shortage of accommodation, by a very high rate of income tax, and by the almost continuous industrial troubles on the mainland, which, of course, have their repercussions on us, but we all hope that they will prove to be only passing phases of post-war rehabilitation. I think that even in the present circumstances Tasmania has much to offer pensioners who desire reasonable value for their pensions, and good condition of living for themselves and their families.

It is, of course, desirable that anyone who is thinking of settling here should come and see local conditions for himself before finally committing himself, and that he should ensure that at least temporary accommodation is available against his arrival.

I, too, shall be glad to do my best to answer any inquiries on the subject.

Yours faithfully,

C.S.W. RAYNER,

c/o Bank of Australasia,

Colonel, I.A.

Hobart, Tasmania.

MADRASIS IN THE I.A.M.C.

To The Editor of the U.S.I. "Journal".

Dear Sir,

I read with considerable interest and pleasure an article in your January number under the signature "Madrasi" (a writer whose identity I think I can guess). May I as representative of the ancillary services endorse everything he has to say about the admirable little men from the South?

I went in January 1943, as a British Service Officer with considerable doubts, to my first command of Indian Troops—a Field Ambulance. My doubts were not lessened when I found that the Class Composition was 100% Madrasi and my Second-in-Command, a regular I.M.S. Officer of the most die-hard type who believed that all manly virtues end at the Indus, had no doubts at all. He referred to them as "chattering little swamis".

A very few weeks' experience showed us our mistake, and also showed that our men were all and more that your correspondent has called them. They were clean (when you showed them how) keen, teachable (except of course, the clerks) and tigers for hard work (again except the clerks). Their essential "guttiness" did not find its outlet in squabbles in the lungar, and they came up smiling with their wounded at the end of stages which left me exhausted with nothing more to carry than a map-case. As an example, at one time they were carrying patients from Goppe Garrett's Garden twice in the twenty-four hours and liking it. Under fire they were as brave as the next man, and considerably braver than the next but one. Training them and taking them to war was the most rewarding thing that any man could ask for.

There is only one point on which I disagree with your contributor. The Madrassi E.C.O. is considerably more than "a stroke ahead" of his brother officers, at least in the I.A.M.C. He is, for the most part, a real leader who has an interest in and affection for his men and commands it in return. He can accept responsibility and can appreciate a situation and act on it without looking round for help. Am I wrong in thinking that these are the qualities that make him also such a good doctor?

I.A.O. 44/S/46 lays down the Post-war Class Composition of the I.A.M.C. as only 20 % Madrasi. Let us hope that is because more will be needed for the fighting Battalions and not from any failure to recognise this splendid material.

Yours faithfully, N. BICKFORD, Lieutenant-Colonel, R.A.M.C.

P.S.: A Commander once told me that he had 400 units under him, everyone of which was the best in the Army. Perhaps he was right after all.

SELECTION OF OFFICERS

To The Editor of the U.S.I. "Journal"

Dear Sir,

Major-General Moore—clearly a great enthusiast—has written a most interesting and enlightening article, "Selection or Personal Prejudice". To the layman, it seems that he has overstressed certain points—in particular his distrust of the average C. O. to report objectively and fairly on his officers. Generally speaking, he is wrong in this. Commanding Officers, especially when the report is based on Service in an operational area, do in fact know their officers well and report on them honestly. This is a time-honoured system. Does General Moore seriously suggest that it has resulted, in the past, in generally unsuitable officers being given advancement? Sometimes, Yes: usually, No. Most of us have no important complaints about the new system of "scientific"

selection (it is new when compared with the long period over which other methods have been used). What we complain of is that the C.O's and Brigadiers' reports are given insufficient weight in the process of selecting officers for regular commission, when those reports are based on personal knowledge of the officers' behaviour and performance in an operational area over a considerable period of time. Such reports are based on fact.

The officer who has proved himself in and out of action, as a leader, as a man-master, as an administrator, is the man we want. He may, for various reasons, not show up well in front of a selection board. I have personal knowledge of one outstanding case where a first-class, proved officer was graded very low by

a selection board, and I have heard of others.

In such cases, I suggest that the correct procedure is for those responsible for final selection to have both reports put before them and, in cases of doubt, the C.O's and Brigadier's report should carry the day. To place the officer in front of a board for a second test is not satisfactory. An officer who has not shown up well once, is likely to fail again. In this way, we shall be sure that we do not lose fine, proved war-leaders by a too meticulous adherence to a system of selection which has yet to be proved infallible.

H.Q. AFNEI, SEAC.

Yours faithfully, J.F.R. FORMAN, Major-General.

An Error Corrected

Among the "Letters to the Editor" published in our July issue was one from Mr. R. M. Hall, of Bassein, Burma, giving the most interesting story of the career of Colonel Smith Dun, who, having enlisted as a recruit in the 2/20 Burma Rifles in 1924, served in all ranks until he was recently appointed Colonel. Unfortunately, the name of the officer was badly mutilated in its travels to the printing machine, and we gladly publish the correct name above. His friends may like to know that Colonel Smith Dun accompanied the Burma Army contingent to London for the Victory Parade in June.

A Well-Deserved Tribute.

Writing to The Statesman on the subject of the rioting in Calcutta, a cor-

respondent who signed himself "Indian" said:

"Tommy Atkins's presence in the city has been a comfort to his friends, of good cheer to the panic-stricken, a relief to the distressed, and a terror to the wrong-doer. By night Tommy, with his gun, patrolling the streets has inspired confidence in those who need it. By day his comrades have rescued wounded and injured, removed the terrorized to places of safety, helped to clear the streets of stinking corpses, and keep the city free of epidemics. On their mission of peace the very leaders who have been maligning Tommy were escorted by him. But for Tommy, the events of the last few days might have ended in a general civil war.

"A few weeks back, his comrades were dropping from the air food and medicine to people in Chittagong. When sweepers struck work or waterworks employees refused to obey orders, Tommy helped in scavenging or maintained the city's water supply. In 1943 he distributed food and milk and shared his rations with the famished in Bengal. In earthquakes Tommy rescues people entrapped and blows up dangerous buildings.

"His countrymen may well feel proud of him. He has been loyal to his

King and country and has served humanity as a Christian should."

NOTES BY THE SECRETARY

New Members

The following new members have been elected to membership of the Institution during the past three months:-

Abraham, Captain H.G.W.

Aftab Ahmad, Esq.

Atma Jit Singh, Lieut., R.I.N.

Aganoor, Major J.

Balwant Singh, Lt.-Comdr., R.I.N.

Bans, Captain R.S.

Baswani, Lt.-Cdr. (E) B.S., R.I.N.

Bellam, Major J.H.

Byram, Lieut,-Colonel B.K.

Cameron, Brigadier R.D.

Carpenter, Lieut. G.P.T.

Chapman, L.C., Esq.

Cooke, Major C.M.

Cruickshank, Major G.J.

Das, Major T.S.

*Datt, Colonel D., O.B.E.

Devasar, P/O. U.R.

Fanderlinden, Sub. Lt. R.B., R.I.N.V.R.

Fazl Haq, Major.

Francis, Major P.G.

Fraser, Lieut.-Colonel D.M.

Grewal, Major H.S.

Haider, Lieut.-Colonel M., M.B.E.

Hall, Major J.A.P.

Hashim, Captain M.

Heble, Lieut. M.K., R.I.N.

Hepper, Lt.-Col. M.G.A.

Horgan, 2/Lieut. W.C.

Honeyman, Lt.-Comdr. F., R.I.N.R.

Ijaz, Major H.S.

Iskandar Mirza, Lt.-Col., C.I.E., O.B.E., I.P.S.

Jakeman, Major T.E.

Jefferis, Brig. Sir Millis R., K.B.E., M. C.

Jesudason, Lieut. L.N.C., R.I.N.

*Kalha, Major D.S.

Key, Major-General B.W., D.S.O., M.C.

Khan, Captain A. A.

Kulkarni, Capt. N.G.

La Bouchardiere, Captain N.K.

Lalkaka, Lieut. Sarosh J., R.I.N.

McKenzie, Major C.W.

Maxwell, Major J.F.

^{*} Life Members.

Mehta, Captain S.N.
Mohd. Shariff, Captain.
Mohatarem, Captain G. R.
Mohindra Singh, Lieut. (S).
Morgan, Major T.S.
Nye, H.E. Lieut.-General Sir Archibald, G.C.I.E., K.C.B., K.B.E., M.C.
Governor of Madras.

Onkar Singh Kalkat, Major. *Palmer, Lieut.-Colonel G.J. Pratap, Lieut. (S) R., R.I.N. *Pring-Mill, Captain R.D.F. Petrie, Lt.-.Comdr. (L) W.H. Ram Swarup Singh, Captain. Riddick, Major G.R. Rowley, Captain D.W. Sanyal, Captain S.C. Schulte, Major F.N. Scott-Oldfield, Major C.E. Shamsher Singh, Major. Sher Khan, Lieut.-Colonel M. Sharma, Captain G.C. Siddiqui, Lt.-Colonel M.F. Singha, Major S.C. Smith, Brigadier W.G., D.S.O. Sukhwant Singh, Captain. Swann, Lieut.-Colonel A.E. White, Lieut. N. Dov.

Subscribing members who have enrolled during the past quarter include "E" Mess, H.Q., Eastern Command. Officers Mess, 20 Indian Infantry Brigade. Imperial Secretariat Library, New Delhi. Officers Mess, Probyn's Horse. O.C., "C" Coy., 2nd (U.P.) Bn., U.O.T.C., I.T.F. 3/16th Punjab Regiment. 2nd Bn., 7th Gurkha Rifles. Comdt., 1 Baroda Infantry. Adjutant, Jind Infantry. Army Training School, Patiala. Officers Mess, S.T.C., Jalahalli. Librarian, Central Advisory Board of Education Library, Government of India, New Delhi. Hony. Secretary, 1st Ind. Armd. Divl. Engineers Mess. Commanding, 362 (Q.V.O. Madras S. & M.) Fd. Coy., R.I.E. Mess Secretary, 4/8th Punjab Regiment.

Honours and Awards

The following members of the Institution have been awarded the decorations indicated for gallant and distinguished service in Burma:-

C.B.E.—Brigadier R.I. Jones, O.B.E.; Brigadier C.I. Jerrard;

Brigadier E. F. E. Armstrong, O.B.E.; Brigadier R.G.B. Prescott, C.M.G., O.B.E.; Brigadier B.C.H. Gerty, D.S.O.

O.B.E.—Lieut.-Colonel A. H. B. Ingleby; Lieut.-Colonel C. J. Baird; Lieut.-Colonel E. N. Jameson; Lieut.-Colonel P. S. Gyani; Colonel H. A. Lash; Lieut.-Colonel P. H. D. Panton, M.B.E.

M.B.E.—Major Adalat Khan; Captain P.G. Malins; Major J.A. Jamieson; Lieut.-Colonel J. McL. Ross; Major P.N. Glover.

D.S.O.—Lieut.-Colonel A. D. MacConachie; Lieut.-Colonel E.C. Pickard.

M.C.-Major C.G. Ferguson; Major F.S. Jeffreys; Major L.H.W. Axtell.

Gold Medal Essay Competition

We have pleasure in announcing that the Judges have selected the paper submitted by Lt. Colonel G.L.W. Armstrong, of the P. A, Os Department, H.Q., S.A.C.S.E.A., as the winning essay in the 1945/46 Competition. The subject set was:

"Co-ordination and control in peace and war of the forces of all three services, British and Dominion, in the Indian Ocean and neighbouring territories".

On this occasion the Judges felt unable to recommend the award of the Gold Medal, in place of which they have unanimously recommended the payment of Rs. 250 to the winning author, whose paper will be published in the January issue of the Journal.

The Council is most grateful to the Judges—K.M. Pannikar, Esq., Prime Minister of Bikaner; Lieut.-General C.M.P. Durnford, and Group Captain D.H.F. Barnett, who acted as Judge in place of the A/A.O.C., Air Forces in India.

The subject set for the competition which closes on June 30, 1947 is: "MAN MANAGEMENT". Full details of the competition and the rules will be found in the front section of this issue.

MacGregor Memorial Medal

Recommendations for the award of the MacGregor Memorial Medal should be submitted by May 1 of each year.

The MacGregor Memorial Medal was founded in 1888 as a memorial to the late Major-General Sir Charles MacGregor, who founded the United Service Institution of India. It is awarded for the best military reconnaissance or journey of exploration of the year.

The awards are made in June, and are: (a) For officers, British or Indian, silver medal, and (b) for soldiers, British or Indian, a silver medal with Rs. 100 as gratuity. For especially valuable work, a gold medal may be awarded in place of one of the silver medals, whenever the administrators of the Fund deem it desirable. The Council may also award a special additional silver medal, without gratuity to a soldier for specially good work.

The award of the medals is made by His Excellency the Commander-in-Chief, India, as Vice-Patron, and the Council of the United Service Institution of India, who were appointed administrators of the Fund by the MacGregor Memorial Committee,

Eligibility for the award is open to: (a) Officers and other ranks of all forces of the British Commonwealth of Nations while serving with the India Establishment, or with South East Asia Command. (b) Officers and other ranks of the Royal Indian Navy, Indian Army, Royal Indian Air Force and of the Indian States Forces, wherever serving. (The term "Indian Army" includes the Indian Auxiliary and Territorial Forces, Frontier Militia, Levies, Military Police and Military Corps under local governments).

Personal risk to life during the reconnaissance or exploration is not a necessary qualification for the award of the medal: but, in the event of two journeys being of equal value, the man who has incurred the greater risk will be considered to have the greater claim to the award.

When the work of the year has either not been of sufficient value, or notice of it has been received too late for consideration before the Council Meeting, the medal may be awarded for any reconnaissance during previous years considered by His Excellency the Commander-in-Chief in India to deserve it.

The medal may be worn in uniform by Indian soldiers on ceremonial parades, suspended round the neck by the ribbon issued with the medal. Replacements of the ribbon may be obtained on payment from the Secretary, United Service Institution of India, Simla.

Indian Divisions During The War

The series of pocket-size booklets describing the operations on active service of Indian Divisions during the late war provide an unusually interesting record of the part played by Indian troops.

Each booklet is profusely illustrated and well got-up, contains photographs of the Divisional and Brigade Commanders as well as maps and smaller pictures illustrating actions in which the Divisions took part, and gives a graphic word picture of the work done. There is also a booklet giving the story of the 43rd Gurkha Lorried Brigade.

Booklets already published are:		
"Red Eagles"	4th	Indian Division.
"The Fighting Fifth"	5th	Indian Division.
"Golden Arrow"	7th	Indian Division.
"One More River"	8th	Indian Division.
"Teheran to Trieste"	10th	Indian Division.
"Dagger Division"	19th	Indian Division.
"The Arakan Campaign"	$25 ext{th}$	Indian Division.
"Tiger Head"	$26 \mathrm{th}$	Indian Division.
"A Gurkha Brigade in Italy"	43rd	Gurkha Lorried Bde

The appearance, production and general lay-out of the booklets reflects the highest possible credit on the Directorate of Public Relations, G.H.Q., India, and the staff which compiled them. We unhesitatingly recommend them to all who served in those divisions, and to all who are proud to have been associated with the Indian Army during the war.

Copies may be obtained from D.P.R., G.H.Q, New Delhi, price annas 12 each.



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His Excellency General Sir Robert A. Cassels, G.C.B., C.S.I., D.S.O., Former Commander-in-Chief in India.